

PO No	Supplier	Line No	Rel No	Terms	Purchased Item	Description	For Project	Equipment ID	Order Qty	Received Qty	Accounting Job No	Container No	Status	Receive Date	Price/Unit
P0039521	ACI001-VC	1	1	Net 30	M1018R1.125	M1018R1.125 : 1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM A108 receive ft			20	4/12/2018	S059685		Stock	4/10/2018	\$ 3.24 / ft
		2			MT-A513-T 0.8750W0 120	A513 Seamless Alloy Steel Round Tubing 0.875"dia. x 0.120" Wall MATL: AS PER ASTM A513 TYPE 5 (1020/1026)SEAMLESS ALLOY STEEL ROUND TUBING (DOM) AS PER ASTM A513 TYPE 5			60		S059686		Stock	4/10/2018	\$ 2.06 / ft
		3			M6061T6B1.000X04.000	MATERIAL: 6061-T6 6061-T6 Bar 1.00 X 4.00 : T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft			24		S059687		Stock	4/10/2018	\$ 13.25 / ft
		4			M304R0.375	304 Round Bar 0.375 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive ft			24		S059688		Stock	4/10/2018	\$ 1.19 / ft
		5			MT-HRS-B-0.500X2.250	Hot Rolled Steel Bar 0.500" X 2.250" : MATL: HOT ROLLED STEEL BAR AS PER ASTM A36 OR ASTM A1011 OR 44W ft			6		S059689		Stock	4/10/2018	\$ 6.70 / ft
		6			MT-1144-H0.250	AISI 1144 Stressproof Steel Hex Bar 0.250" MATL SPEC.S: AISI 1144 STRESSPROOF STEEL HEX BAR ASTM A311 or UNS G11440			12		S059690		Stock	4/10/2018	\$ 5.77 / ft
		7			MT-1144-H0.500	MATL SPEC.S: AISI 1144 ROUND BAR MINIMUM ROCKWELL C = 20 Rc MAXIMUM ROCKWELL C = 38 Rc AS PER ASTM A29. AMS 6349. AMS 6382. AMS 6529			20		S059691		Stock	4/10/2018	\$ 1.18 / ft
		8			MT-4140-R0.625	MATL SPEC.S: AISI 4140 ROUND BAR MINIMUM ROCKWELL C = 20 Rc MAXIMUM ROCKWELL C = 38 Rc AS PER ASTM A29. AMS 6349. AMS 6382. AMS 6529			20		S059692		Stock	4/10/2018	\$ 2.88 / ft
Total:										186					
										199					

Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

DART
AEROSPACE

Tel (613) 632-5200

PURCHASE ORDER
PO039521

Supplier:

AC1001-VC
Acier Ouellette Inc.
935 Boul. Du Havre
Valleyfield
QC
J6S 5L1 Canada
Phone: 800 667 4248
Fax: 450 377 5696

Ship To:

1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No:

PO039521

PO Date:

4/6/18

Due Date:

4/12/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact:

Lavoie, ChantalPhone:
clavoie@dartaero.com

Via:

Ground

Pymt Terms:

Net 30

Freight Terms:

Special Comments: QUOTE: SOU0093923, SOU0097336

E-MAILED
APR 06 2018

Line	Item	Part	Supplier	Description	Status	Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	M1018R1.125	M1018R1.125		M1018R1.125 1025 ROUND BAR : MATERIAL: AISI 1018- M1010S20GA AS PER MIL-S-7097 OR ASTM A108 receive ft	Firmed	4/12/18	20 ft	0 ft		\$3.243/ft	\$64.86
NOTE CUT BAR IN HALF 2 PCS 10 FT											
2	MT-A513-T- 0.8750W0.120			A513 Seamless Alloy Steel Round Tubing 0.875"dia. x 0.120" Wall MATL: AS PER ASTM A513 TYPE 5 (1020/1026)SEAMLESS ALLOY STEEL ROUND TUBING (DOM) AS PER ASTM A513 TYPE 5	Firmed	4/12/18	60 ft	0 ft		\$2.0595/ft	\$123.57
3	M6061T6B1.000X04.000			6061-T6 Bar 1.00 X 4.00 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	4/12/18	24 ft	0 ft		\$13.245416/ft	\$317.89
4	M304R0.375			304 Round Bar 0.375 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	4/12/18	24 ft	0 ft		\$1.1879166/ft	\$28.51

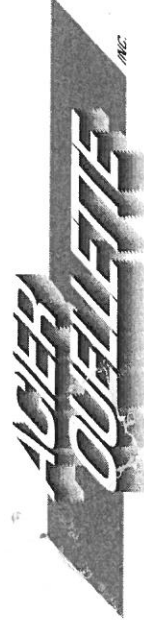
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Line	Item	Part	Supplier	Part No	Description	Status	Due	Order	Received	Balance	Unit	Extended
5		MT-HRS-B-0.500X2.250			Hot Rolled Steel Bar 0.500" X 2.250" : MATL: HOT ROLLED STEEL BAR AS PER ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018 receive ft	Firmed	4/12/18	6 ft	0 ft	\$6.69667/ft		\$40.18
6		MT-1144-H0.250			AISI 1144 Stressproof Steel Hex Bar 0.250" MATL SPEC'S: AISI 1144 STRESSPROOF STEEL HEX BAR ASTM A311 or UNS G11440	Firmed	4/12/18	12 ft	0 ft	\$5.77/ft		\$69.24
7		MT-1144-H0.500			AISI 1144 Stressproof Steel Hex Bar 0.250" MATL SPEC'S: AISI 1144 STRESSPROOF STEEL HEX BAR ASTM A311 or UNS G11440	Firmed	4/12/18	20 ft	0 ft	\$1.1755/ft		\$23.51
8		MT-140-R0.625			MATL SPEC'S AISI 4140 ROUND BAR MINIMUM ROCKWELL C = 20 Rc MAXIMUM ROCKWELL C = 38 Rc AS PER ASTM A29, AMS 6349, AMS 6382, AMS 6529	Firmed	4/12/18	20 ft	0 ft	\$2.878/ft		\$57.56
Grand Total: \$725.32												

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents
A048 counterfeit parts avoidance, detection, mitigation and disposition program
A049 supplier awareness
Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 4/6/18 2:44 PM dart.lavoie.chantal



DELIVERY - CLIENT

CO00082609

ACIER OUELLETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Customer N°

CLI0001056

Date

2018/04/06

Delivery date

2018/04/11

Your order N°

39521

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

OUELLETTE VALLEYFIELD

Processed by
Josianne Bourdon

Salesman

Carrier

Credit Terme

Net 30 Days

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M

Delivery Route 5

Page

1

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only			
				CMD	EXP	B/O	IN	I	S	C
1 ROUND 4140 HEAT TREAT 5/8 (R) R4140-58H 1 X 20'	20.86	20.00	PI_\$CLB		1 X 20'		20'			
TRANSIT ST-JEROME LE 09/04										
3 ROUND STRESSPROOF 1/4 RANDOM NS RST-14-V 1 X 12' AC15037-GR-09/04	2.00	12.00	PI_\$CLB		1 X 12'		12'			
4 ROUND STRESSPROOF 1/2 (R) RST-12 2 X 20'-R/L 12'	13.36	20.00 24.00	PI_\$CLB		2 X 12'		24'			

NIR : R-109516-6

Next Page...



DELIVERY - CLIENT

ACIER OUELLETTE INC.

935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

CO00082609

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M

Delivery Route 5

Page 2

Credit Terme

Net 30 Days

Carrier

OUELLETTE VALLEYFIELD

Salesman

Josianne Bourdon

Processed by

39521

Your order N°

2018/04/11 00:00

Date

2018/04/06

Customer N°

CLI0001056

Product Description

Weight

Qty

U/M

PCS NB

EXP

B/O

IN

I

S

C

OUT

Conditions :

All sold and delivered materials remain the property of "Acier Ouellette Inc" until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Total Weight (Lbs) : 36.22

NIR : R-109516-6

Prepared By :

Verified By :

Delivered By :

Time

Y	M	D

Customer's Signature

Date

Total (\$CAD)



ACIER OUELLETTE INC.

935, Boul. du H vre
Salaberry de Valleyfield (Qu bec) J65 5L1
T l.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Order - Factory

CO00082609

Billed to

DART AEROSPACE LTD
1270 , ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

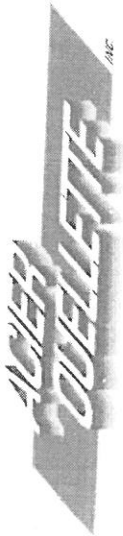
, Ontario,
Att : CHANTAL LAVOIE T l.: 613-632-5200

Customer N 
Date
Delivery date
Your order N 
Processed by
Salesman
Carrier
Credit Terme

CLI0001056
2018/04/06
2018/04/12 12:00:00 AM
39521
Josianne Bourdon
OUELLETTE VALLEYFIELD
Net 30 Days

Delivery Route 5

Product Description	Weight	Qty	UM	PCS NB		Internal Use Only			
				CMD	EXP	B/O	IN	I	S C
1 ROUND 4140 HEAT TREAT 5/8 (R) R4140-58H 1 X 20' HEAT: 75061935 LINE 8	20.86	20.00	PI_\$CLB	1.00					
TRANSIT ST-JEROME LE 09/04				0.00					
3 ROUND STRESSPROOF 1/4 RANDOM NS RST-14V 1 X 12' AC15032-GR-05704 heat 20450880 LINE 6	2.00	12.00	PI_\$CLB	1.00					
4 ROUND STRESSPROOF 1/2 (R) RST-12 2 X 12' heat number 20504590 LINE 7	13.36	20.00	PI_\$CLB	1.00					
SURCHARGE ENERGETIQUE FRAIS_ENERGETIQUE			\$	0.00					



ACIER OUELLETTE INC.

935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Order - Factory

CO00082609

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att: CHANTAL LAVOIE Tél.: 613-632-5200

Delivery Route 5

Customer N°
Date
Delivery date
Your order N°
Processed by
Salesman
Carrier
Credit Terme

CLI0001056
2018/04/06
2018/04/12 12:00:00 AM
39521
Josianne Bourdon

OUELLETTE VALLEYFIELD
Net 30 Days

Product Description	Weight	Qty	UM	PCS NB			Internal Use Only		
				CMD	EXP	B/O	IN	I	S C
1 ROUND 4140 HEAT TREAT 5/8 (R) R41140-58H 1 X 20' HEAT: 75061935 TRANSIT ST-JEROME LE 09/04	20.86	20.00	PI_\$CLB	1.00					OUT
3 ROUND STRESSPROOF 1/4 RANDOM NS RST-14-V 1 X 12' AC15037-GR-09/04 heat to follow	2.00	12.00	PI_\$CLB	1.00					
4 ROUND STRESSPROOF 1/2 (R) RST-12 2 X 12' heat number 20504590	13.36	20.00	PI_\$CLB	1.00					
SURCHARGE ENERGETIQUE FRAIS_ENERGETIQUE			\$	0.00					

Conditions :

All sold and delivered materials remain the property of "Acier Ouellette Inc." until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By :

Verified By :

Delivered By :

Time

Customer's Signature

Y M D

Total (\$CAD)

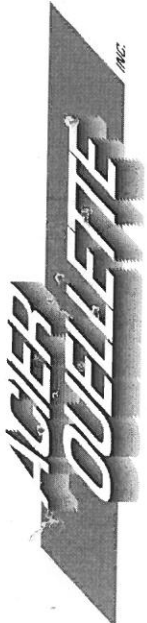
Deposit

Balance

174.31

0.00

174.31



DELIVERY - CLIENT

Copy CO00082603

ACIER OUELLETTE INC.

935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Customer N°
CLI0001056

Date
2018/04/06

Delivery date
2018/04/10

Your order N°
39521

Processed by
Josianne Bourdon

Salesman

Carrier
OUELLETTE VALLEYFIELD

Credit Terme
Net 30 Days

Page
1

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

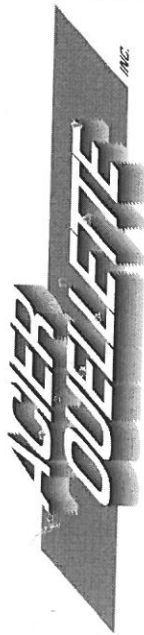
Delivery Route 5

Instruction F-M

Product Description	Weight	Qty	U/M	PCS NB		Internal Use Only			
				CMD	EXP	B/O	IN	I	S C
1 ROUND CR 1 1/8 1018 (R) RCR-118 5264 1 X 20' R/L HEAT: 137590	67.60	20.00	PI_\$CLB		1x19'		20'		APR 10 2018 DAS 11 9-89
2 TUBE MEC 0.875 OD X .120 (R) TME-0875120 6787 3 X 20' R/L HEAT: A354330	58.08	60.00	PI_\$CPI		3x38'		69'		APR 10 2018 DAS 11 9-89
3 FLAT ALU 1 X 4 6061-T6 * FAL-14 2532 2 X 12' HEAT: 68708	115.20	24.00	PI_\$CLB		2x12'		24'		APR 10 2018 DAS 11 9-89
4 ROUND SS 3/8 304 (R) RSS-38 5768 2 X 12' R/L HEAT: 646M	9.02	24.00	PI_\$CLB		1x12'		24'		APR 10 2018 DAS 11 9-89

NIR : R-109516-6

Next Page...



DELIVERY - CLIENT

Copy CO00082603

ACIER OUELLETTE INC.

935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Customer N°

CLI0001056

Date

2018/04/06

Delivery date

2018/04/10

Your order N°

39521

Processed by

Josianne Bourdon

Salesman

Carrier

OUELLETTE VALLEYFIELD

Credit Terme

Net 30 Days

Page

2

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Delivery Route 5

Instruction F-M

Product Description	Weight	Qty	U/M	PCS NB		Internal Use Only			
				CMD	EXP	B/O	IN	I	S C
5 PLATE 44W 1/2 RANDOM P44-12-V 4062 1 X 2 1/4" X 72" heat: 724995 COUPE AU FEU FEU 3	30.60	1.50	PIZ \$CLB						
		1.00	UN						
Total Weight (Lbs) : 280.50				NIR : R-109516-6					

Conditions :

All sold and delivered materials remain the property of "Acier Ouellette Inc" until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By :

Verified By :

Delivered By :

Time

Y	M	D

Customer's Signature

Date

Total (\$CAD)



Order - Factory

CO00082609

Product Description	Weight	Qty	UM	PCS NB			Internal Use Only			
				CMD	EXP	B/O	IN	I	S	C
Conditions :				Total Weight (LBS) : 36.22						
Conditions :				NIR : R-109516-6						
<p>All sold and delivered materials remain the property of "Acer Ouellette Inc." until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acer Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acer Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.</p>										
Prepared By :	Verified By :	Delivered By :	Time	Customer's Signature			Y M D			
				Total (\$CAD)			174.31			
				Deposit			0.00			
				Balance			174.31			

CERTIFICATE OF TEST

DART

CUSTOMER ORDER NUMBER

CUSTOMER PART NUMBER

0001

501719

SOLD TO:

Page 01 of 02

Certification Date 14-AUG-2017

Invoice Number

T127467

Description: 1/4 RD X 12" R/L

HEAT: 20450880

ITEM: 501719

Line Total: 11 LB

Specifications: ASTM A108 13

ASTM A311 CL B 10

ASTM A29/A29M 15

CHEMICAL ANALYSIS

C	MN	P	S	SI	NI	CR	MO
0.42	1.39	0.011	0.273	0.20	0.04	0.07	0.02
CU	AL	V	N	B	NB		
0.08	0.001	0.002	0.006	0.0001	0.001		
RCPT: K240971							

COUNTRY OF ORIGIN : USA

MECHANICAL PROPERTIES

DESCRIPTION	YLD STR	PSI	ULT TEN	%ELONG	IN 02 IN	%RED	HARDNESS
	108556.0		122156.0	16.2		47.8	24
							RC

GRAIN SIZE : 5

The above data were generated from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination.

We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any special finish or treatment.

The withdrawal recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes.

Material did not come in contact with mercury while in our possession.

TERRY GALBRAITH

MANAGER, CORPORATE PURCHASING

Aug 2017

A311

1/4" Straight



11-11-11

P.O. 15037N

CERTIFICATE OF TEST

Page 02 of 02

Certification Date 14-AUG-2017

Invoice Number T127467

CUSTOMER ORDER NUMBER

FRANCINE
CUSTOMER PART NUMBER

0001 501719

SOLD TO:

Description:

1/4 RD X 12' K/L

HEAT: 20450880

ITEM: 501719

Line Total: 11 LB

STRAND CAST

MATERIAL IS FREE FROM MERCURY CONTAMINATION
NO WELD REPAIR PERFORMED ON MATERIAL

COMMENTS

GRAIN PRACTICE COARSE

SOURCE/MELTED CHARTER STEEL - OHIO (USA)

RED. RATIO 997.8:1

MELTED & MFG IN USA

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination.

We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description.

The welded recording of data, figures, or fraudulent statements in connection with test results may be punishable as a felony under Federal statutes.

MANAGERS, CORPORATE PURCHASING

Material did not come in contact with mercury while in our possession.
TERRY GALBRAITH

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

CUSTOMER ORDER NUMBER
NUMERO DE COMMANDE DU CLIENT

PART NUMBER/NUMERO DE PIÈCE
AC00005079

506255

SOLD TO: ACIER OUELLETTE INC
SHIP TO: EXPDIE A:

22 BOULEVARD J-F KENNEDY
ST JEROME QC J7Y 4B6

Description: 4140/4142 HR ANN BAR ASTM A322

Line Total: 426 LB

Specifications:
ASTM A322 07
ASTM A29/A29M 11
ASTM A322 13
CAT 1E0024
ASTM A322 91

ASTM A304 05
EN 10204 3.1 04
ASTM E112
ASTM E381
SAE J422
ASTM A304 11
ASTM A255
ASTM A304 02

CHEMICAL ANALYSIS

C	MN	P	S	SI	NI	CR	MO
0.40	0.97	0.007	0.026	0.25	0.23	0.86	0.16
CU	SN	AL	V	NB			
0.21	0.01	0.023	0.002	0.002			

COUNTRY OF ORIGIN : USA

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du fabricant après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut. The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

MANAGER QUALITY ASSURANCE
GERANT DE L'ASSURANCE QUALITÉ

JOANNE DESPRES

Material did not come in contact with mercury while in our possession. Par les présentes, nous certifions que le matériel couvert par ce rapport rencontra les spécifications décrites ci-haut.

Certification Date
25-APR-2017

Invoice Number
T365756

Page 02 of 02



1412 150th Street
Hammond IN 46327-1799

CERTIFICATION

CERTIFICATE Rev
H180769 2

DATE 08/11/17

PAGE 2

PURCHASE ORDER B99740

ORDER 943870-1

CUSTOMER ITEM V715371

ITEM 110500132SP4

GRADE STRESSPROOF(R) SHAPE Round

SIZE 5000

SIZE MM 12.7000 MM

LENGTH MM 3352.8 / 3810

STRESSPROOF(R) Spec/Rev: ASTM A108-13 Spec/Rev: ASTM A29/A29M-10 Spec/Rev: ASTM A311-04(2010) CLASS B

HEAT

GRAIN PRACTICE

SOURCE / MELTED

COARSE CHARTER STEEL - OHIO (USA)

CAST REDUCTION RATIO

249.5:1

CHEMISTRY

20504590

0.410

1.360

.013

.279

0.190

0.050

0.100

.020

.150

.001

.002

NB

N/A

N/A

N/A

N/A

N/A

N/A

N/A

N/A

N/A

N/A

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N/A

N/A

N/A

N/A

N/A

N/A

N/A

N/A

N/A

N/A

LOT	HS45598	131,930 PSI	103,107 PSI	ELONG	14.10	R OF A	35.80	HARDNESS	HRC = 26	SR TEMP	
JOB	TENSILE	2% YIELD									
MECHANICAL											
.007	N/A	N/A	N/A	AS	PB	SE	BI	B	N/A		
N	TE										
0.410	1.360	.013	.279	0.190	0.050	0.100	.020	.150	.001	.002	V
MIN	P	S	SI	NI	CR	MO	CU	AL			
COARSE	CHARTER STEEL - OHIO (USA)	STRAND	249.5:1	1.99							
HEAT	20504590	GRAIN PRACTICE	SOURCE / MELTED	CAST	REDUCTION RATIO	DI					

WE, hereby certify that these goods were produced in compliance with all applicable requirements of sections 6, 7, and 12 of the Fair Labor Standards Act, as amended, and all regulations and orders of the United States Department of Labor issued under section 14 thereof. Material was not exposed to mercury or any metal alloy that is liquid at ambient temperature during processing or while in our possession. No weld repairs performed on the above material.

CERTIFICATE OF TEST

By: *Walter P. Kreitzer*

Walter P. Kreitzer - Director of Q.A./Chief Metallurgist

ARANA Y LUPARDO, 2
48490 UGAO-MIRAVALLS/VIZCAY
Tfno.: 946480211
Fax: 946480128
Email: calpradera@calbradospradera.es
www.calbradospradera.es

CERTIFICADO DE CALIDAD/QUALITY REPORT

De acuerdo a /Made according to:

EN 10204/DIN 58049

3.1

ALBARAN	45927	CLIENTE	LES ACTIERS TRANSBRC (1997) LTÉE	CUSTOMER
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Productos Calibrados de acero. Condiciones técnicas de suministro.

NOTES: EN 10277

Bright steel products. Technical delivery conditions.

Norm:

PRODUCTO SOLICITADO / PRODUCT ACCORDING ASTM A108

N.º PRÊMIO	INSCRIÇÃO	DATA DE EMISSÃO	DATA DE VENCIMENTO	VALOR DO PRÊMIO
PAR-46825	12L14 RED. ESTRADO 31,75 (1/14")	980	137240	31,75
PAJ-46961	1018 CUA. ESTRADO 12,70 (1/2")	2.034	137245	12,70
SM-46716	1018 CUA. ESTRADO 25,40 (1")	1.020	137450	25,40
OU-47016	1018 RED. ESTRADO 22,23 (7/8")	990	137508	22,23
MJP-46937	1018 CUA. ESTRADO 12,70 (1/2")	994	137555	12,70
MJP-46937	1018 RED. ESTRADO 31,75 (1/14")	1.994	137558	31,75
PAJ-46981	1018 RED. ESTRADO 12,70 (1/2")	874	130937	12,70
PAJ-46981	1018 RED. ESTRADO 15,88 (5/8")	902	137561	15,88
PAJ-46981	1018 RED. ESTRADO 25,40 (1")	2.892	137773	25,40
PAJ-46981	12L14 RED. ESTRADO 25,40 (1")	1.060	202250	25,40
OU-47027	1018 RED. ESTRADO 28,58 (1 1/8")	1.006	137590	28,58
OU-47027	1018 RED. ESTRADO 9,53 (3/8")	1.000	137736	9,53
PAR-47159	12L14 RED. ESTRADO 7,94 (5/16")	922	202248	7,94
OU-47027	1018 CUA. ESTRADO 12,70 (1/2")	1.026	137589	12,70
MN-47068	12L14 RED. ESTRADO 15,88 (5/8")	992	137729	15,88
MN-47068	12L14 RED. ESTRADO 63,50 (2 1/2")	998	137732	63,50
MN-47068	12L14 RED. TORNEADO 82,55 (3 1/4")	1.090	137733	82,55
MN-47068	12L14 RED. ESTRADO 19,05 (3/4")	1.694	202238	19,05
CA-46985	1018 CUA. ESTRADO 28,58 (1 1/8")	1.020	138186	28,58

Composición química de la colada / *Chemical Analysis of Heat*

MEDELA	OF	COLADA	Cost M.	C	Cr	Cu	Mn	Mo	Ni	P	Pb	S	Si
31.75	0.00	137240	40676 G	0.070	0.025	0.022	1.145	0.010	0.020	0.046	0.271	0.300	0.012
12.70	0.00	137245	40878 S	0.160	0.000	0.000	0.766	0.000	0.000	0.020	0.000	0.026	0.254
25.40	0.00	137450	40439 SR	0.180	0.000	0.000	0.760	0.000	0.000	0.017	0.000	0.028	0.220
12.72	0.00	137505	40717 G	0.160	0.000	0.000	0.640	0.000	0.000	0.014	0.000	0.008	0.130
31.75	0.00	137555	40878 S	0.160	0.000	0.000	0.766	0.000	0.000	0.020	0.000	0.026	0.254
31.75	0.00	137558	40919 G	0.160	0.000	0.000	0.610	0.000	0.000	0.013	0.000	0.022	0.147
12.70	0.00	130937	38275 A	0.152	0.000	0.000	0.767	0.000	0.000	0.009	0.000	0.006	0.194
15.88	0.00	137561	40759 G	0.155	0.000	0.000	0.625	0.000	0.000	0.009	0.000	0.010	0.119
25.40	0.00	137773	40652 G	0.155	0.000	0.000	0.610	0.000	0.000	0.013	0.000	0.011	0.140
25.40	0.00	137773	40652 G	0.155	0.000	0.000	0.610	0.000	0.000	0.013	0.000	0.011	0.140
28.58	0.00	137590	40910 G	0.155	0.000	0.000	0.635	0.000	0.000	0.013	0.000	0.016	0.137
9.53	0.00	137756	40673 GM	0.160	0.000	0.000	0.720	0.000	0.000	0.011	0.000	0.010	0.160
7.94	0.00	202248	40859 OC	0.080	0.007	0.012	0.990	0.001	0.018	0.061	0.270	0.310	0.001
12.70	0.00	137589	40878 S	0.160	0.000	0.000	0.766	0.000	0.000	0.020	0.000	0.026	0.254
15.88	0.00	137729	40956 S	0.069	0.024	0.059	1.150	0.013	0.041	0.053	0.260	0.312	0.017
13.50	0.00	137732	40929 W	0.070	0.140	0.220	1.070	0.020	0.100	0.053	0.230	0.298	0.020
82.55	0.00	137733	40345 IS	0.080	0.000	0.000	1.110	0.000	0.000	0.040	0.230	0.270	0.010
19.05	0.00	202238	40817 AG	0.070	0.077	0.012	1.100	0.011	0.019	0.055	0.310	0.290	0.003
28.58	0.00	138186	40440 SR	0.160	0.000	0.000	0.710	0.000	0.000	0.017	0.000	0.040	0.130



ARANA Y LUPARDO, 2
48490 UGAO-MIRAVALLS/VIZCAYA (SPAIN)
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CERTIFICADO DE CALIDAD/QUALITY REPORT

De acuerdo a /Made according to:

EN 10204/DIN 50049

3.1

Nº CERTIFICADO / CERTIFICATE NR.: 45927

ALBARAN 45927	Delivery Note Nr.
CLIENTE LES ACIERS TRANSBEC (1997) LTÉE	CUSTOMER

Productos Calibrados de acero. Condiciones técnicas de suministro.

Bright steel products. Technical delivery conditions.

Norma : EN 10277

MEDIDA	OR	COLADA	Resistencia	Tens. strength	Lim. elastico	Yield point	Alargamiento	Dureza HB	Restricción %
31,75	137240	40676 G	525,92	N/mm ²	0,2% N/mm ²	512,03	25,00	176,00	47,11
12,70	137245	40878 S	600,00	511,00	358,00	559,00	15,10	190,00	0,00
25,40	137450	40439 SR	511,00	625,03	599,51	559,00	24,20	185,00	55,97
22,23	137508	40717 G	600,00	581,40	560,00	559,00	15,10	190,00	0,00
31,75	137558	40919 G	581,40	653,05	610,77	560,00	32,74	176,00	51,73
12,70	130937	38275 A	653,05	591,90	576,41	639,55	19,38	210,00	62,67
15,88	137561	40759 G	656,99	591,90	576,41	639,55	16,40	190,00	58,82
25,40	137773	40652 G	591,90	581,48	565,65	565,65	20,54	180,00	42,92
28,58	137590	40910 G	568,80	546,30	546,30	546,30	32,76	169,00	59,00
9,53	137736	40673 GM	684,30	619,80	619,80	619,80	16,54	210,00	62,06
7,94	202248	40859 OC	548,10	518,80	518,80	518,80	11,92	159,00	57,27
12,70	137589	40878 S	600,00	585,51	565,74	559,00	15,10	190,00	0,00
15,88	137729	40956 G	585,51	410,00	234,00	559,00	25,80	172,00	48,83
63,50	137732	40929 W	410,00	0,00	0,00	234,00	0,00	125,00	0,00
82,55	137733	40345 IS	0,00	580,62	566,97	566,97	19,96	185,00	48,88
19,05	202238	40817 AG	580,62	501,00	350,00	566,97	29,00	0,00	0,00
28,58	138186	40440 SR	501,00	501,00	350,00	566,97	29,00	0,00	0,00

Calidad Superficial

DESCRIPCION	OF	Clase
12L14 RED. ESTIRADO 31,75 (1/4")	137240	3
1018 RED. ESTIRADO 22,23 (7/8")	137508	2
1018 RED. ESTIRADO 31,75 (1/4")	137558	3
1018 RED. ESTIRADO 12,70 (1/2")	130937	2
1018 RED. ESTIRADO 15,88 (5/8")	137561	2
1018 RED. ESTIRADO 25,40 (1")	137773	2
12L14 RED. ESTIRADO 25,40 (1")	202250	3
1018 RED. ESTIRADO 28,58 (1 1/8")	137590	2
1018 RED. ESTIRADO 9,53 (3/8")	137736	2
12L14 RED. ESTIRADO 7,94 (5/16")	202248	3
12L14 RED. ESTIRADO 15,88 (5/8")	137729	3
12L14 RED. ESTIRADO 63,50 (2 1/2")	137732	2
12L14 RED. TORNADO 82,55 (3 1/4")	137733	2
12L14 RED. ESTIRADO 19,05 (3/4")	202238	3



ARANA Y LUPARDO, 2
48490 UGAO-MIRAVALLS/VIZCAYA (SPAIN)
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CERTIFICADO DE CALIDAD/QUALITY REPORT

De acuerdo a /Made according to:

EN 10204/DIN 50049

3.1

ALBARAN	45927	CLIENTE	LBS ACIERS TRANSBRC (1997) LTBE
Delivery Note Nr.		CUSTOMER	

Norma : EN 10277

Productos Calibrados de acero. Condiciones técnicas de suministro.

Bright steel products. Technical delivery conditions.

Observaciones: BARRAS DE ACERO ESTIRADAS / TORNEADAS EN FRIO SIN ALEAR

DEPARTAMENTO DE CALIDAD: Certifica que el mencionado producto cumple con las especificaciones del pedido.
QUALITY DEPARTMENT: Certify that the product fulfills the order specifications.

Fecha/Date: 09/02/2017

Firmado: Susana Fernandez
Directora de Calidad



325 rue Avro
Pointe-Claire, QC, Canada, H9R 5W3
Téléphone (514) 697-5120
Fac-simile (514) 694-8310

Test de dureté Rockwell Rockwell Hardness Test

LES ACIERS TRANSBEC (1997) LTEE.
4054 BOUL. LE CORBUSIER # 201
LAVAL, QC
H7L5R2

commande Sapa / Sapa order # : 7021578

bon de commande / Purchase order # : OU-47427

de matrice / Die # : MS 16386

Alliage & trempage / Alloy & temper : 6061 T6

Longueur / Length : 3657 mm

Contrôle / Control # : 86430-1

Coulée / Cast # : 68708

Dureté Rockwell E /
Rockwell E hardness : 93 HRE
Min. requis /
Min. required : 88 HRE
Max. permis /
Max. permitted : 100 HRE

Composition chimique typique / Typical chemical composition :

	Si	Fe	Cu	Mn	Mg	Cr	Zn	P
6063	0.20 - 0.60	0.35 Max	0.10 Max	0.10 Max	0.45 - 0.90	0.10 Max	0.10 Max	0.10 Max
6005	0.60 - 0.90	0.35 Max	0.10 Max	0.10 Max	0.40 - 0.60	0.10 Max	0.10 Max	0.10 Max
6005A	0.66 - 0.74	0.14 - 0.28	0.08 - 0.16	0.18 - 0.26	0.46 - 0.54	0.03 Max	0.05 Max	0.05 Max
6061	0.40 - 0.80	0.70 Max	0.15 - 0.40	0.15 Max	0.80 - 1.20	0.04 - 0.35	0.25 Max	0.15 Max
6351	0.7 - 1.3	0.5 Max	0.10 Max	0.40 - 0.80	0.40 - 0.80	—	0.20 Max	0.20 Max

Nous certifions que le matériel fourni rencontre les exigences chimiques telles qu'annoncées par la norme ASTM B-221-14 excepté pour la section 8.2 (nombre de spécimen).

We hereby certify that the material supplied meets the chemical properties as published by the ASTM B-221-14 except for section 8.2 (number of specimen).

Sincèrement vôtre,
Yours truly,

date : 2017-03-31

Daniel Alfredo Pelletier
Directeur Qualité
Quality Director

sapa:



North American Stainless Canada Inc. #5768
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

Customer: 007080 003

Your Order: MS1116
 WAS Order: IN 0257931 04 Heat Treat Code: 44,987
 Corrosion: ASTM A262/15 Prac A/E OR

Round Bar, Annealed, Cold Draw
 UNS 30400/30403 EN 10204 3.1, ASTM A484/16
 UNS A276/17, ASTM A479/17, ASTM A182/16a CHEM ONLY,
 ASTM A479/13, AMS S182/13 CHEM ONLY
 UNS 5639, AMS 5647K, AMS Q88-763D, Q88-763F, ASTM F899/12b
 SOLUTION ANNEAL TEMP 1900F MIN, ASTM A320/17a CL 1 GR B8
 ASTM A193/16-AMS S193/13 CL 1 GR B8

COMPLIES W/REQUIREMENTS OF DPAR 252.225-7009 EU DIRECTIVE 2011/65/EU. ROHS. EAF+AOD+CC. NO WELD REPAIR. REWELDED AND MPG IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

CHEMICAL ANALYSIS												Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323			
NIB Reat		CM	C %	CU %	CR %	CU %	MS %	MO %	N %	NI %	P %	Chemical Analysis per ASTM A751/14a			
646M		US	.028	.18	18.14	.39	1.31	.280	.071	8.50	.028				

Product ID	1 d o i c i	HB No.	.2YS KSI	UTS KSI	RA %	Elong %	2"
332280 9	R L	226.0	84.97	111.55	69.24	41.70	

Technical
Dept. Mgr.

KRIS LARK
1/19/2018

ERDEMİR ve ÇELİK FABRİKALARI T.A.Ş.
 OUTSTANDING CAPITAL : 3.500.000.000 TL
 PRODUCTION PLANT : ERDEMİR

CUSTOMER : WIRTH STEEL
 ORDER NO : 78603208709
 DIMENSIONS, mm : 12.700 X 2438 X 985 (0.500 X 96 X 240 INCH)
 STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2 (ERDEMİR 3246)
 PRODUCT TYPE & DEFINITION : LKX : HOT ROLLED HEAVY PLATE WITH MILL EDGE

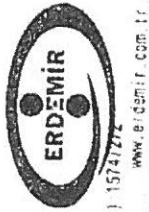
TEST CERTIFICATE
 EN 10204 : 2004 TYPE 3.1

DATE : 18/10/2017
 CERTIFICATE NO : 71612651
 PAGE NO : 1

LOT NO.1 NO MERCURY COMPOUNDS NO WELD REPAIR
 FULLY KILLED AND FINE GRAIN PRACTICE

PRODUCT INFORMATION				MECHANICAL REQUIREMENTS				CHEMICAL COMPOSITION, CAST ANALYSIS													
TICKET NO	WEIGHT (MT)	HEAT NO	COIL or PLATE NO	P.S or P.P	TENSILE TEST	BENDI or TEST	YIT or HARDNESS	IMPACT TEST POSITION	HIGH TEMP	C	MN	P	S	SI	AL	CU	NI	V	N	PPM	
					SAW POS YIELD STRENGTH NIMM2	EL 50	VAL VAL	1 2 3	AVR TEMP °C	YIELD NIMM2	%	%	%	%	%	%	%	%	%	%	
0237035595	9.250	735248	70230175031012	6	TT 399.1 561.9 38	TT 433.5 587.4 32	TT 433.5 587.4 32	TT 438.4 597.2 32	TT 433.5 587.4 32	0.197 1.445 0.018 0.002 0.204 0.025 0.025 0.042 0.073	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075
			735248	73524820800420	TT 433.5 587.4 32	TT 433.5 587.4 32	TT 438.4 597.2 32	TT 433.5 587.4 32	0.182 1.250 0.018 0.007 0.190 0.033 0.025 0.040 0.073	0.182 1.250 0.018 0.007 0.190 0.033 0.025 0.040 0.073	0.191 1.223 0.019 0.003 0.194 0.030 0.023 0.042 0.076	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	
			735252	73525220600210	TT 433.5 587.4 32	TT 433.5 587.4 32	TT 438.4 597.2 32	TT 433.5 587.4 32	0.191 1.223 0.019 0.003 0.194 0.030 0.023 0.042 0.076	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075		
			735252	73525220600310	TT 438.4 597.2 32	TT 438.4 597.2 32	TT 438.4 597.2 32	TT 433.5 587.4 32	0.191 1.223 0.019 0.003 0.194 0.030 0.023 0.042 0.076	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075		
			735252	73525220600410	TT 433.5 587.4 32	TT 433.5 587.4 32	TT 438.4 597.2 32	TT 433.5 587.4 32	0.191 1.223 0.019 0.003 0.194 0.030 0.023 0.042 0.076	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075		
0237035596	3.100	735252	70230175211010	2	TT 437.4 591.3 32	TT 437.4 591.3 32	TT 437.4 591.3 32	TT 400.1 560.0 38	TT 438.4 597.2 32	0.182 1.250 0.018 0.007 0.190 0.033 0.025 0.040 0.073	0.182 1.250 0.018 0.007 0.190 0.033 0.025 0.040 0.073	0.191 1.223 0.019 0.003 0.194 0.030 0.023 0.042 0.076	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	
			735353	73535320900110	TT 437.4 591.3 32	TT 437.4 591.3 32	TT 438.4 597.2 32	TT 433.5 587.4 32	0.191 1.223 0.019 0.003 0.194 0.030 0.023 0.042 0.076	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075			
			735353	73535320900220	TT 437.4 591.3 32	TT 437.4 591.3 32	TT 438.4 597.2 32	TT 433.5 587.4 32	0.191 1.223 0.019 0.003 0.194 0.030 0.023 0.042 0.076	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075			
			725106	72510620200220	TT 400.1 560.0 38	TT 438.4 597.2 32	TT 438.4 597.2 32	TT 400.1 560.0 38	0.191 1.223 0.019 0.003 0.194 0.030 0.023 0.042 0.076	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075			
			735252	73525220600320	TT 438.4 597.2 32	TT 438.4 597.2 32	TT 438.4 597.2 32	TT 438.4 597.2 32	0.191 1.223 0.019 0.003 0.194 0.030 0.023 0.042 0.076	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075		
0237035597	3.150	725106	70230175511010	2	TT 437.4 591.3 32	TT 437.4 591.3 32	TT 437.4 591.3 32	TT 400.1 560.0 38	TT 438.4 597.2 32	0.182 1.250 0.018 0.007 0.190 0.033 0.025 0.040 0.073	0.182 1.250 0.018 0.007 0.190 0.033 0.025 0.040 0.073	0.191 1.223 0.019 0.003 0.194 0.030 0.023 0.042 0.076	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	
			725106	72510620200220	TT 437.4 591.3 32	TT 437.4 591.3 32	TT 438.4 597.2 32	TT 433.5 587.4 32	0.191 1.223 0.019 0.003 0.194 0.030 0.023 0.042 0.076	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075			
			735252	73525220600320	TT 438.4 597.2 32	TT 438.4 597.2 32	TT 438.4 597.2 32	TT 438.4 597.2 32	0.191 1.223 0.019 0.003 0.194 0.030 0.023 0.042 0.076	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075			
			724595	72459520200310	TT 400.1 576.6 36	TT 400.1 576.6 36	TT 400.1 576.6 36	TT 400.1 576.6 36	0.191 1.223 0.019 0.003 0.194 0.030 0.023 0.042 0.076	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075			
			724595	72459520600220	TT 400.1 576.6 36	TT 400.1 576.6 36	TT 400.1 576.6 36	TT 400.1 576.6 36	0.191 1.223 0.019 0.003 0.194 0.030 0.023 0.042 0.076	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075		
0237035598	9.380	724595	70230180451010	6	TT 400.1 560.0 38	TT 438.4 597.2 32	TT 438.4 597.2 32	TT 400.1 560.0 38	TT 438.4 597.2 32	0.191 1.223 0.019 0.003 0.194 0.030 0.023 0.042 0.076	0.197 1.235 0.017 0.003 0.208 0.030 0.026 0.043 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075	0.195 1.339 0.021 0.003 0.220 0.030 0.028 0.042 0.075		

WE, THE MANUFACTURER, HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2 (ERDEMİR 3246) WITH SATISFACTORY RESULTS



NOTE : Top, Middle, End, Transverse, Longitudinal, P.S. Piece of Slice, P.P. Piece of Plate
 MERSİS Number (İstanbul Head Office) : 0352-0006 4250-0020 / Trade Registry Number (İstanbul Department) : 98659 / Trade Registry Number (Ereğli Department) : 15747272
 Head Office : İstanbul / Barışlar Mah. Arslan Sok. No : 6 / 34745 Alışveriş / İSTANBUL - TÜRKİYE

ERDEMİR ÇELİK FABRİKALARI T.A.Ş.
OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ERDEMİR

CUSTOMER : WIRTH STEEL
ORDER NO : 76503206709
DIMENSIONS (mm) : 12.700 X 2438 X 6096 (0.500 X 96 X 240 INCH)
STANDARD & GRADE : CSA G40 21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2 (ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : LKX : HOT ROLLED HEAVY PLATE WITH MILL EDGE

TEST CERTIFICATE
EN 10204 : 2004 TYPE 3.1

DATE : 18/10/2017
CERTIFICATE NO : 71612651
PAGE NO : 2

LOT NO:1 NO MERCURY COMPOUNDS NO WELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE



PRODUCT INFORMATION				MECHANICAL PROPERTIES				CHEMICAL COMPOSITION, CAST ANALYSIS																							
TICKET NO/WEIGHT (MT)	HEAT NO	COIL or PLATE NO	P.S or P.P	ISAM or P.P	TENSILE TEST	BEND or TEST	Ag or BR	Y/T or VAL	HARD or INESS	IMPACT TEST, joule	HIGH TEMP °C	YIELD N/MMQ	1	2	3	AVR	TEMP °C	C %	MN %	P %	S %	SI %	AL %	CU %	NI %	V %	N %	PPM			
0237039599	12.270	7023018046L0101	8	TT	359.1	569.8	34	TT	407.0	576.6	36	0.191	1.223	0.019	0.003	0.194	0.030	0.023	0.042	0.076	43	0.191	1.223	0.019	0.003	0.194	0.030	0.023	0.042	0.076	43
		725106	TT	399.1	569.8	34	TT	400.1	569.8	36	0.191	1.223	0.019	0.003	0.194	0.030	0.023	0.042	0.076	43	0.191	1.223	0.019	0.003	0.194	0.030	0.023	0.042	0.076	43	
		725106	TT	400.1	569.8	36	TT	400.1	569.8	36	0.191	1.223	0.019	0.003	0.194	0.030	0.023	0.042	0.076	43	0.191	1.223	0.019	0.003	0.194	0.030	0.023	0.042	0.076	43	
		725106	TT	400.1	569.8	36	TT	399.1	569.8	34	0.191	1.223	0.019	0.003	0.194	0.030	0.023	0.042	0.076	43	0.191	1.223	0.019	0.003	0.194	0.030	0.023	0.042	0.076	43	
		725106	TT	399.1	569.8	34	TT	399.1	569.8	34	0.191	1.223	0.019	0.003	0.194	0.030	0.023	0.042	0.076	43	0.191	1.223	0.019	0.003	0.194	0.030	0.023	0.042	0.076	43	
		725106	TT	409.9	573.7	36	TT	409.9	573.7	36	0.197	1.445	0.018	0.002	0.204	0.025	0.025	0.042	0.073	54	0.197	1.445	0.018	0.002	0.204	0.025	0.025	0.042	0.073	54	
		735248	TT	409.9	573.7	36	TT	409.9	573.7	36	0.197	1.445	0.018	0.002	0.204	0.025	0.025	0.042	0.073	54	0.197	1.445	0.018	0.002	0.204	0.025	0.025	0.042	0.073	54	
		7023018111L0101	6	TT	407.0	584.5	34	TT	407.0	584.5	34	0.195	1.339	0.021	0.003	0.220	0.030	0.028	0.042	0.075	64	0.195	1.339	0.021	0.003	0.220	0.030	0.028	0.042	0.075	64
		724995	TT	407.0	584.5	34	TT	407.0	584.5	34	0.195	1.339	0.021	0.003	0.220	0.030	0.028	0.042	0.075	64	0.195	1.339	0.021	0.003	0.220	0.030	0.028	0.042	0.075	64	
		724995	TT	400.1	576.6	35	TT	400.1	576.6	35	0.195	1.339	0.021	0.003	0.220	0.030	0.028	0.042	0.075	64	0.195	1.339	0.021	0.003	0.220	0.030	0.028	0.042	0.075	64	
0237039601	6.060	7023018112L0101	4	TT	409.1	576.6	36	TT	409.1	576.6	36	0.195	1.339	0.021	0.003	0.220	0.030	0.028	0.042	0.075	64	0.195	1.339	0.021	0.003	0.220	0.030	0.028	0.042	0.075	64
		724995	TT	409.1	576.6	36	TT	409.1	576.6	36	0.195	1.339	0.021	0.003	0.220	0.030	0.028	0.042	0.075	64	0.195	1.339	0.021	0.003	0.220	0.030	0.028	0.042	0.075	64	
		724995	TT	400.1	576.6	35	TT	400.1	576.6	35	0.195	1.339	0.021	0.003	0.220	0.030	0.028	0.042	0.075	64	0.195	1.339	0.021	0.003	0.220	0.030	0.028	0.042	0.075	64	
		724995	TT	409.9	573.7	36	TT	409.9	573.7	36	0.197	1.445	0.018	0.002	0.204	0.025	0.025	0.042	0.073	54	0.197	1.445	0.018	0.002	0.204	0.025	0.025	0.042	0.073	54	
		735248	TT	409.9	573.7	36	TT	409.9	573.7	36	0.197	1.445	0.018	0.002	0.204	0.025	0.025	0.042	0.073	54	0.197	1.445	0.018	0.002	0.204	0.025	0.025	0.042	0.073	54	
		7023018111L0101	6	TT	407.0	584.5	34	TT	407.0	584.5	34	0.195	1.339	0.021	0.003	0.220	0.030	0.028	0.042	0.075	64	0.195	1.339	0.021	0.003	0.220	0.030	0.028	0.042	0.075	64
		724995	TT	407.0	584.5	34	TT	407.0	584.5	34	0.195	1.339	0.021	0.003	0.220	0.030	0.028	0.042	0.075	64	0.195	1.339	0.021	0.003	0.220	0.030	0.028	0.042	0.075	64	
		724995	TT	400.1	576.6	35	TT	400.1	576.6	35	0.195	1.339	0.021	0.003	0.220	0.030	0.028	0.042	0.075	64	0.195	1.339	0.021	0.003	0.220	0.030	0.028	0.042	0.075	64	
		724995	TT	409.9	573.7	36	TT	409.9	573.7	36	0.197	1.445	0.018	0.002	0.204	0.025	0.025	0.042	0.073	54	0.197	1.445	0.018	0.002	0.204	0.025	0.025	0.042	0.073	54	
		735248	TT	409.9	573.7	36	TT	409.9	573.7	36	0.197	1.445	0.018	0.002	0.204	0.025	0.025	0.042	0.073	54	0.197	1.445	0.018	0.002	0.204	0.025	0.025	0.042	0.073	54	

WE (THE MANUFACTURER) HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF CSA G40 21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2 (ERDEMİR 3246) WITH SATISFACTORY RESULTS



NOTE: T Top, M Middle, E End, T Transverse, L Longitudinal, P S Piece of Slice, P P Piece of Plate
MEKİSİS Number (İstanbul Head Office) 0552-0006-260-0020 Trade Registry Number (İstanbul Department) 90659 Trade Registry Number (Ereğli Department) 157472
Head Office: İstanbul, Barbaros Mah. Ardiç Sok. No: 6 34745 Ataşehir (İSTANBUL - TURKEY)

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ERDEMİR ÇELİK FABRİKASI T.A.Ş.
OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ERDEMİR

CUSTOMER : WIRTH STEEL
ORDER NO : 78603208709
DIMENSIONS, mm : 12.700 X 2438 X 6096 (0.500 X 96 X 240 INCH)
STANDARD & GRADE : CSA G40-21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2 (ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : LK: HOT ROLLED HEAVY PLATE WITH MILL EDGE

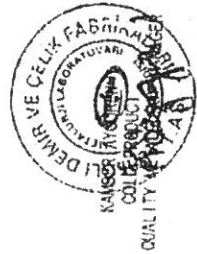
TEST CERTIFICATE
EN 10204 : 2004 TYPE 3.1

DATE : 18/10/2017
CERTIFICATE NO : 71612651
PAGE NO : 3

LOT NO.1 NO MERCURY COMPOUNDS NO WELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE

PRODUCT INFORMATION				MECHANICAL PROPERTIES				CHEMICAL COMPOSITION, CAST ANALYSIS													
TICKET	NO/WEIGHT (MT)	HEAT NO	COIL or PLATE NO	PS or P.P	SAM POS	TENSILE TEST	BEND or TEST	Y/T or HARDNESS	IMPACT TEST, Joule	HIGH TEMP	C	MN	P	S	SI	AL	CU	NI	V	N	PPM
0237035602	3,140	735248	73524820100420	2	TT	409.9 573.7 36						0.197	1.445	0.018	0.002	0.204	0.025	0.025	0.042	0.073	54
0237035603	3,080	735248	73524820400410	2	TT	399.1 561.9 38						0.197	1.445	0.018	0.002	0.204	0.025	0.025	0.042	0.073	54
0237035604	3,050	735353	73535320900320	2	TT	437.4 591.3 32						0.182	1.250	0.018	0.007	0.190	0.033	0.025	0.040	0.078	50
0237042307	13,970	735252	73525220400320	3	TT	433.5 587.4 32						0.197	1.235	0.017	0.003	0.203	0.030	0.026	0.043	0.075	44
		716534	71653420500110	3	TT	424.6 572.7 32						0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
		716534	71653420500210	3	TT	424.6 572.7 32						0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
		716534	71653420500320	3	TT	424.6 572.7 32						0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
		716534	71653420600110	3	TT	424.6 572.7 32						0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
		716534	71653420600210	3	TT	424.6 572.7 32						0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
		716534	71653420600320	3	TT	424.6 572.7 32						0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49

WE, THE MANUFACTURER, HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF CSA G40 21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2 (ERDEMİR 3246) WITH SATISFACTORY RESULTS.



NOTE: T: Top, M: Middle, S: End, T: Transverse, L: Longitudinal, P: Piece of Steel, P: Piece of Plate
Welding Number (Istanbul Head Office): 0352-0066-4250-0020, Trade Registry Number (Istanbul Department): 90655, Trade Registry Number (Eregli Department): 157472
Head Office: Istanbul Barbaros Mah. Aralık Sok. No: 5 34746 Alışehir İSTANBUL - TURKEY

ERDEMİR ÇELİK FABRİKASI T.A.Ş.
OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ERDEMİR

TEST CERTIFICATE
EN 10204 : 2004 TYPE 3.1

DATE : 18/10/2017
CERTIFICATE NO : 71612551
PAGE NO : 4

CUSTOMER : WIRTH STEEL
ORDER NO : 78603208709
DIMENSIONS : 12.700 X 2438 X 6095 (0.500 X 96 X 240 INCH)
STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2(ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : LKX : HOT ROLLED HEAVY PLATE WITH MILL EDGE

LOT NO:1 NO MERCURY COMPOUNDS NO WELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE



PRODUCT INFORMATION				MECHANICAL TEST RESULTS				CHEMICAL COMPOSITION, CAST ANALYSIS											
TICKET NO/WEIGHT (MT)	HEAT NO	COIL or PLATE NO	P.S or P.P	TENSILE TEST	BEND or TEST	VAL. VAL	Y/T or BH	HIGH TEMP	YIELD	C	MN	P	S	SI	AL	CU	NI	V	N
				YIELD STRENGTH N/MM2	50 EL	VAL	VAL	1	2	3	AVR	TEMP	YIELD	NMM2					
037042320113.560	716534	70230229651010	9	TT 441.3 590.4 32															
	716534	71663420600410		TT 441.3 590.4 32															
	716534	71663420600420		TT 441.3 590.4 32															
	716534	71663420700110		TT 424.6 572.7 32															
	716534	71663420700120		TT 424.6 572.7 32															
	716534	71663420700210		TT 441.3 590.4 32															
	716534	71663420700310		TT 424.6 572.7 32															
	716534	71663420700320		TT 424.6 572.7 32															
	716534	71663420700410		TT 441.3 590.4 32															
	716534	70230229721010	8	TT 424.6 572.7 32															
023704232012.380	716534	71663420500310		TT 441.3 590.4 32															
	716534	71663420600220		TT 424.6 572.7 32															
	716534	71663420600110		TT 424.6 572.7 32															
	716534	71663420600120		TT 424.6 572.7 32															
	716534	71663420600210		TT 441.3 590.4 32															
	716534	71663420600220		TT 441.3 590.4 32															
	716534	71663420600310		TT 424.6 572.7 32															
	716534	71663420600320		TT 424.6 572.7 32															
	716534	70230229741010	8	TT 424.6 572.7 32															
	716534	71663420500310		TT 424.6 572.7 32															

WE (THE MANUFACTURER) HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF CSA G40 21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2(ERDEMİR 3246) WITH SATISFACTORY RESULTS.



NOTE: T Top, M Middle, E End, T Transverse, L Longitudinal, P.P. Piece of Plate
MEASIS Number (Istanbul Head Office): 0352-6005-4260-3020, Trade Registry Number (Istanbul Department): 30655, Trade Registry Number (Eregli Department): 157477
Head Office: Istanbul Barbaros Mah. Ardıç Sok. No: 6 34746 Ataşehir İSTANBUL - TURKEY



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ERDEMİR-DEMİR VE ÇELİK FABRİKASI
 ORDER NO : 78603208709
 DIMENSIONS : 12.700 X 2438 X 6096 (0.500 X 96 X 240 INCH)
 STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2 (ERDEMİR 3246)
 PRODUCT TYPE & DEFINITION : LKX : HOT ROLLED HEAVY PLATE WITH MILL EDGE

CUSTOMER : WIRTH STEEL
 ORDER NO : 78603208709
 DIMENSIONS : 12.700 X 2438 X 6096 (0.500 X 96 X 240 INCH)
 STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2 (ERDEMİR 3246)
 PRODUCT TYPE & DEFINITION : LKX : HOT ROLLED HEAVY PLATE WITH MILL EDGE

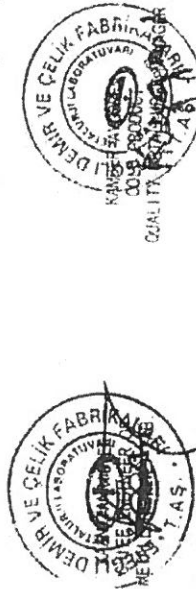
TEST CERTIFICATE
 EN 10204 : 2004 TYPE 3.1

DATE : 18/10/2017
 CERTIFICATE NO : 71612651
 PAGE NO : 5

LOT NO:1 NO MERCURY COMPOUNDS NO WELD REPAIR
 FULLY KILLED AND FINE GRAIN PRACTICE

PRODUCT INFORMATION				MECHANICAL PROPERTIES				CHEMICAL COMPOSITION, CAST ANALYSIS											
TICKET NO/WEIGHT (MT)	HEAT NO	COIL OR PLATE NO	P.S. or P.P	TENSILE TEST	BEND or TEST	VAL	Y/T or n	IMPACT TEST, Joule	TEMP °C	C %	MN %	P %	S %	SI %	AL %	CU %	NI %	V %	N PPM
0237042323; 12.350	716634	716634204002101	TT	441.3 590.4 32	TT	441.3 590.4 32	TT	441.3 590.4 32	TT	0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634204002201	TT	441.3 590.4 32	TT	441.3 590.4 32	TT	441.3 590.4 32	TT	0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634204003101	TT	424.6 572.7 32	TT	424.6 572.7 32	TT	424.6 572.7 32	TT	0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634204003201	TT	441.3 590.4 32	TT	441.3 590.4 32	TT	441.3 590.4 32	TT	0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634204004101	TT	441.3 590.4 32	TT	441.3 590.4 32	TT	441.3 590.4 32	TT	0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634204004201	TT	441.3 590.4 32	TT	441.3 590.4 32	TT	441.3 590.4 32	TT	0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634205004101	TT	441.3 590.4 32	TT	441.3 590.4 32	TT	441.3 590.4 32	TT	0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716634	716634205004201	TT	441.3 590.4 32	TT	441.3 590.4 32	TT	441.3 590.4 32	TT	0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
	716636	716636201001101	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	0.187	1.217	0.021	0.006	0.168	0.026	0.028	0.044	0.076	40
	716636	716636201002101	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	0.187	1.217	0.021	0.006	0.168	0.026	0.028	0.044	0.076	40
0237042330; 12.350	716636	716636201003101	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	0.187	1.217	0.021	0.006	0.168	0.026	0.028	0.044	0.076	40
	716636	716636201004101	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	0.187	1.217	0.021	0.006	0.168	0.026	0.028	0.044	0.076	40
	716636	716636201004201	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	0.187	1.217	0.021	0.006	0.168	0.026	0.028	0.044	0.076	40
	716636	716636201005101	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	0.187	1.217	0.021	0.006	0.168	0.026	0.028	0.044	0.076	40
	716636	716636201005201	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	0.187	1.217	0.021	0.006	0.168	0.026	0.028	0.044	0.076	40
	716636	716636201006101	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	0.187	1.217	0.021	0.006	0.168	0.026	0.028	0.044	0.076	40
	716636	716636201006201	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	0.187	1.217	0.021	0.006	0.168	0.026	0.028	0.044	0.076	40
	716636	716636201007101	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	0.187	1.217	0.021	0.006	0.168	0.026	0.028	0.044	0.076	40
	716636	716636201007201	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	0.187	1.217	0.021	0.006	0.168	0.026	0.028	0.044	0.076	40
	716636	716636201008101	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	429.5 563.9 34	TT	0.187	1.217	0.021	0.006	0.168	0.026	0.028	0.044	0.076	40

WE (THE MANUFACTURER) HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2 (ERDEMİR 3246) WITH SATISFACTORY RESULTS



NOTE: T Top, W Middle, E End, T Transverse, L Longitudinal, P S Piece of Slice, P P Piece of Plate
 MERSİS Number (İstanbul Head Office): 052-0005-4260-0020, Trade Registry Number (İstanbul Department): 90459, Trade Registry Number (Ereğli Department): 15747
 Head Office: İstanbul, Barbaros Mah. Ardiç Sok. No 6 34746 Alışveriş (İSTANBUL - TURKEY)



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ERDEMİR ÇELİK FABRİKASI
OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ERDEMİR

CUSTOMER : WIRTH STEEL
ORDER NO : 78603208709
DIMENSIONS : 12.700 X 2438 X 6096 (0.500 X 96 X 240 INCH)
STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2 (ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : LKX : HOT ROLLED HEAVY PLATE WITH MILL EDGE

LOT NO:1 NO MERCURY COMPOUNDS NO WELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE

TEST CERTIFICATE
EN 10204 : 2004 TYPE 3.1

DATE : 18/10/2017
CERTIFICATE NO : 71612651
PAGE NO : 6

PRODUCT INFORMATION

TICKET	NO/WEIGHT (MT)	HEAT NO	COIL or PLATE NO	P.S or P.P	ISAN POS	TENSILE TEST	BEND or TEST	Ag or Y/T	HARDNESS	HAPAK TEST POSITION	HIGH TEMP	YIELD	AVR	TEMP
727036	727036204002101	TT	408.9	581.5	32									
727036	727036204002201	TT	408.9	581.5	32									
727036	727036204003101	TT	432.5	575.7	34									
727036	727036204003201	TT	432.5	575.7	34									
727036	727036204004101	TT	408.9	581.5	32									
727036	727036204004201	TT	408.9	581.5	32									
727036	727036204004301	TT	408.9	581.5	32									
727036	727036204004401	TT	408.9	581.5	32									
727036	727036204004501	TT	408.9	581.5	32									
727036	727036204004601	TT	408.9	581.5	32									
727036	727036204004701	TT	408.9	581.5	32									
727036	727036204004801	TT	408.9	581.5	32									
727036	727036204004901	TT	408.9	581.5	32									
727036	727036204005001	TT	408.9	581.5	32									
727036	727036204005101	TT	408.9	581.5	32									
727036	727036204005201	TT	408.9	581.5	32									
727036	727036204005301	TT	408.9	581.5	32									
727036	727036204005401	TT	408.9	581.5	32									
727036	727036204005501	TT	408.9	581.5	32									
727036	727036204005601	TT	408.9	581.5	32									
727036	727036204005701	TT	408.9	581.5	32									
727036	727036204005801	TT	408.9	581.5	32									
727036	727036204005901	TT	408.9	581.5	32									
727036	727036204006001	TT	408.9	581.5	32									
727036	727036204006101	TT	408.9	581.5	32									
727036	727036204006201	TT	408.9	581.5	32									
727036	727036204006301	TT	408.9	581.5	32									
727036	727036204006401	TT	408.9	581.5	32									
727036	727036204006501	TT	408.9	581.5	32									
727036	727036204006601	TT	408.9	581.5	32									
727036	727036204006701	TT	408.9	581.5	32									
727036	727036204006801	TT	408.9	581.5	32									
727036	727036204006901	TT	408.9	581.5	32									
727036	727036204007001	TT	408.9	581.5	32									
727036	727036204007101	TT	408.9	581.5	32									
727036	727036204007201	TT	408.9	581.5	32									
727036	727036204007301	TT	408.9	581.5	32									
727036	727036204007401	TT	408.9	581.5	32									
727036	727036204007501	TT	408.9	581.5	32									
727036	727036204007601	TT	408.9	581.5	32									
727036	727036204007701	TT	408.9	581.5	32									
727036	727036204007801	TT	408.9	581.5	32									
727036	727036204007901	TT	408.9	581.5	32									
727036	727036204008001	TT	408.9	581.5	32									
727036	727036204008101	TT	408.9	581.5	32									
727036	727036204008201	TT	408.9	581.5	32									
727036	727036204008301	TT	408.9	581.5	32									
727036	727036204008401	TT	408.9	581.5	32									
727036	727036204008501	TT	408.9	581.5	32									
727036	727036204008601	TT	408.9	581.5	32									
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727036	727036204008801	TT	408.9	581.5	32									
727036	727036204008901	TT	408.9	581.5	32									
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727036	727036204009201	TT	408.9	581.5	32									
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727036	727036204009401	TT	408.9	581.5	32									
727036	727036204009501	TT	408.9	581.5	32									
727036	727036204009601	TT	408.9	581.5	32									
727036	727036204009701	TT	408.9	581.5	32									
727036	727036204009801	TT	408.9	581.5	32									
727036	727036204009901	TT	408.9	581.5	32									
727036	727036204010001	TT	408.9	581.5	32									
727036	727036204010101	TT	408.9	581.5	32									
727036	727036204010201	TT	408.9	581.5	32									
727036	727036204010301	TT	408.9	581.5	32									
727036	727036204010401	TT	408.9	581.5	32									
727036	727036204010501	TT	408.9	581.5	32									
727036	727036204010601	TT	408.9	581.5	32									
727036	727036204010701	TT	408.9	581.5	32									
727036	727036204010801	TT	408.9	581.5	32									
727036	727036204010901	TT	408.9	581.5	32									
727036	727036204011001	TT	408.9	581.5	32									
727036	727036204011101	TT	408.9	581.5	32									
727036	727036204011201	TT	408.9	581.5	32									
727036	727036204011301	TT	408.9	581.5	32									
727036	727036204011401	TT	408.9	581.5	32									
727036	727036204011501	TT	408.9	581.5	32									
727036	727036204011601	TT	408.9	581.5	32									
727036	727036204011701	TT	408.9	581.5	32									
727036	727036204011801	TT	408.9	581.5	32									
727036	727036204011901	TT	408.9	581.5	32									
727036	727036204012001	TT	408.9	581.5	32									
727036	727036204012101	TT	408.9	581.5	32									
727036	727036204012201	TT	408.9	581.5	32									
727036	727036204012301	TT	408.9	581.5	32									
727036	727036204012401	TT	408.9	581.5	32									
727036	727036204012501	TT	408.9	581.5	32									
727036	727036204012601	TT	408.9	581.5	32									
727036	727036204012701	TT	408.9	581.5	32									
727036	727036204012801	TT	408.9	581.5	32									
727036	727036204012901	TT	408.9	581.5	32									
727036	727036204013001	TT	408.9	581.5	32									
727036	727036204013101	TT	408.9	581.5	32									
727036	727036204013201	TT	408.9	581.5	32									
727036	727036204013301	TT	408.9	581.5	32									
727036	727036204013401	TT	408.9	581.5	32									
727036	727036204013501	TT	408.9	581.5	32									
727036	727036204013601	TT	408.9	581.5	32									
727036	727036204013701	TT	408.9	581.5	32									
727036	727036204013801	TT	408.9	581.5	32									
727036	727036204013901	TT	408.9	581.5	32									
727036	727036204014001	TT	408.9	581.5	32									
727036	727036204014101	TT	408.9	581.5	32									
727036	727036204014201	TT	408.9	581.5	32									
727036	727036204014301	TT	408.9	581.5	32									
727036	727036204014401	TT	408.9	581.5	32									
727036	727036204014501	TT	408.9	581.5	32									
727036	727036204014601	TT	408.9	581.5	32									
727036	727036204014701	TT	408.9	581.5	32									
727036	727036204014801	TT	408.9	581.5	32									
727036	727036204014901	TT	408.9	581.5	32									
727036	727036204015001	TT	408.9	581.5	32									
727036	727036204015101	TT	408.9	581.5	32									
727036	727036204015201	TT	408.9	581.5	32									
727036	727036204015301	TT	408.9	581.5	32									
727036	727036204015401	TT	408.9	581.5	32									

ERDEMİR ÇELİK FABRİKASI T.A.Ş.
OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ERDEMİR

TEST CERTIFICATE

DATE : 18/10/2017
CERTIFICATE NO : 71612651
PAGE NO : 7

CUSTOMER : WIRTH STEEL
ORDER NO : 78603208709
DIMENSIONS, mm : 12 700 X 2438 X 6056 (2.500 X 96 X 240 INCH)
STANDARD & GRADE : CSA G40 21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2 (ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : LKX HOT ROLLED HEAVY PLATE WITH MILL EDGE

LOT NO:1 NO MERCURY COMPOUNDS NO WELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE

PRODUCT INFORMATION				MECHANICAL PROPERTIES				CHEMICAL COMPOSITION, CAST ANALYSIS											
TICKET NO/WEIGHT (MT)	HEAT NO	COIL or PLATE NO	P.S or P.P	TENSILE TEST	YIELD STRENGTH N/MM ²	ELONGATION %	IMPACT TEST, joule	HIGH TEMP	C	Y	AL	SI	S	P	MN	C	NI	V	N
0237042342 (12,300)	727037	727037203004201	TT	412.9	563.9	28	1	1	1	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45
	727037	727037204003101	TT	415.8	573.7	36	2	2	2	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45
	727037	727037204003201	TT	415.8	573.7	36	3	3	3	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45
	727037	727037204004101	TT	412.9	563.9	28	1	1	1	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45
	727037	727037204004201	TT	412.9	563.9	28	2	2	2	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45
	727037	727037204004301	TT	415.8	573.7	36	3	3	3	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45
0237042349 (5,150)	727037	727037203001101	TT	415.8	573.7	36	1	1	1	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45
	727037	727037203001201	TT	415.8	573.7	36	2	2	2	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45
	727037	727037203002101	TT	412.9	563.9	28	3	3	3	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45
	727037	727037203002201	TT	412.9	563.9	28	1	1	1	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45
	727037	727037204001101	TT	415.8	573.7	36	2	2	2	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45
	727037	727037204001201	TT	412.9	563.9	28	3	3	3	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45
0237042352 (9,270)	727036	727036205001101	TT	432.5	575.7	34	1	1	1	0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
	727036	727036205001201	TT	432.5	575.7	34	2	2	2	0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
	727036	727036205002101	TT	408.9	581.5	32	3	3	3	0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
	727036	727036205002201	TT	408.9	581.5	32	1	1	1	0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45

WE (THE MANUFACTURER) HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF CSA G40 21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2 (ERDEMİR 3246) WITH SATISFACTORY RESULTS.



NOTE: T Top, M Middle, E End, T Transverse, L Longitudinal, P.S Piece of Steel, P.P Piece of Plate
VERSIS Number (Istanbul Head Office) 0052-0006-4260-0020 Trade Registry Number (Istanbul Department) 90659 Trade Registry Number (Ereğli Department) 1577439
Head Office: İstanbul Bartares Mah. Ardiç Sok. No: 6 34748 Alışveriş İSTANBUL - TÜRKİYE



ERDEMİR VE ÇELİK FABRİKALARI T.A.Ş.
OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ERDEMİR

CUSTOMER : WIRTH STEEL
ORDER NO : 78603208709
DIMENSIONS, mm : 12.700 X 2438 X 6096 (0.500 X 96 X 240 INCH)
STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2(ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : LKX : HOT ROLLED HEAVY PLATE WITH MILL EDGE

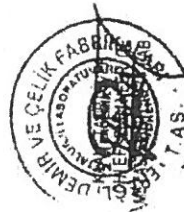
TEST CERTIFICATE
EN 10204 : 2004 TYPE 3.1

DATE : 18/10/2017
CERTIFICATE NO : 71612651
PAGE NO : 8

LOT NO:1 NO MERCURY COMPOUNDS NO WELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE

PRODUCT INFORMATION				MECHANICAL PROPERTIES										CHEMICAL COMPOSITION, CAST ANALYSIS															
TICKET NO/WEIGHT (MT)	HEAT NO	COIL or PLATE NO	P.S or P.P	TENSILE TEST			BEND or TEST	Ag or SH	Y/T or VAL	IMPACT TEST, joule			TEMP °C	C M N P S SI AL CU NI V N PPM															
				SAM POS	YIELD STRENGTH N/MM2	TENSILE EL 50		VAL	VAL	1	2	3	AVR	TEMP °C	YIELD N/MM2	%	%	%	%	%	%	%	%	%	%	%	%	%	%
0237042354 (12.310)	727036	727036205003101	TT	432.5	575.7	34									0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45					
	727036	727036205003201	TT	432.5	575.7	34									0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45					
	727036	727036205004101	TT	408.9	581.5	32									0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45					
	727036	727036205004201	TT	408.9	581.5	32									0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45					
	727036	727036206001101	TT	432.5	575.7	34									0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45					
	727036	727036206001201	TT	432.5	575.7	34									0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45					
	727036	702302300910101	8	408.9	581.5	32									0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45					
	727036	727036207002201	TT	408.9	581.5	32									0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45					
	727036	727036207003101	TT	432.5	575.7	34									0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45					
	727036	727036207003201	TT	432.5	575.7	34									0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45					
0237042355 (12.310)	727036	727036207004101	TT	408.9	581.5	32									0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45					
	727036	727036207004201	TT	408.9	581.5	32									0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45					
	727037	727037201001101	TT	415.8	573.7	36									0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45					
	727037	727037201001201	8	408.9	581.5	32									0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45					
	727036	727036206002101	TT	408.9	581.5	32									0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45					
	727036	727036206003101	TT	432.5	575.7	34									0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45					
	727036	727036206003201	TT	432.5	575.7	34									0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45					
	727036	727036206004101	TT	408.9	581.5	32									0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45					
	727036	727036206004201	TT	408.9	581.5	32									0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45					
	727037	727037201001201	TT	415.8	573.7	36									0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45					

WE, THE MANUFACTURER, HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2(ERDEMİR 3246) WITH SATISFACTORY RESULTS.



NOTE: T: Top, M: Middle, B: End, T: Transverse, L: Longitudinal, P: S: Piece of Steel, P.F: Piece of Plate
WELDER'S Number: (Istanbul Head Office): 0362-0006-4260-0020, Trade Registry Number: (Istanbul Department): 90659; Trade Registry Number: (Ereğli Department): 15747272
Head Office: Istanbul: Barbaros Mah. Aracı Sok. No: 6 34746 Ataşehir - İSTANBUL - TURKEY



ERDEMİR ÇELİK FABRİKASI
OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ERDEMİR

CUSTOMER : WIRTH STEEL
ORDER NO : 78603208709
DIMENSIONS : 12.700 X 2438 X 5095 (0.500 X 96 X 240 INCH)
STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 300W/350W / CR50 TYPE 2 (ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : LKX : HOT ROLLED HEAVY PLATE WITH MILL EDGE

TEST CERTIFICATE
EN 10204 : 2004 TYPE 3.1

DATE : 18/10/2017
CERTIFICATE NO : 71612651
PAGE NO : 9

LOT NO:1 NO MERCURY COMPOUNDS NO YELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE

PRODUCT INFORMATION				MECHANICAL PROPERTIES										CHEMICAL COMPOSITION, CAST ANALYSIS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
TICKET NO/WEIGHT (MT)	HEAT NO	COIL or PLATE NO	P.S or P.P	ISAM POS	TENSILE TEST		BEND or TEST	Y/T or HARDNESS	IMPACT TEST, joule			HIGH TEMP	CHEMICAL COMPOSITION, CAST ANALYSIS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
					YIELD STRENGTH N/MM2	TENSILE STRENGTH N/MM2			1	2	3		AVR	YIELD N/MM2	C %	MIN %	P %	S %	SI %	AL %	CU %	NI %	V %	N %	PM																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
0237042356112, 340	727036	72703620600410	TT	408.9	581.5	32							0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							</

WE (THE MANUFACTURER) HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF CSA G40.21-13 / ASTM A572-15 300W/350W / CR50 TYPE 2 (ERDEMİR 3246) WITH SATISFACTORY RESULTS



NOTE: T.Tco, M.Middle, E.End, T.Transverse, L.Longitudinal, P.P.Piece of Steel, P.P.Piece of Plate
MERSİS Number (Istanbul Head Office): 0352-0036-4256-0000 Trade Registry Number (Istanbul Department): 90659 Trade Registry Number (Ereğli Department): 1574722
Head Office: İstanbul: Barbaros Mah. Aidiç Sok. No: 6 34745 Alataşir İSTANBUL - TURKEY



www.erdemir.com.tr

ERDEMİR ÇELİK FABRİKALARI T.A.Ş.
OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ERDEMİR

CUSTOMER : WIRTH STEEL
ORDER NO : 78603208709
DIMENSIONS : 12.700 X 2438 X 6096 (0.500 X 96 X 240 INCH)
STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2(ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : LKK : HOT ROLLED HEAVY PLATE WITH MILL EDGE

TEST CERTIFICATE
EN 10204 : 2004 TYPE 3.1

DATE : 18/10/2017
CERTIFICATE NO : 71812651
PAGE NO : 10

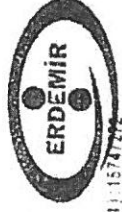
LOT NO:1 NO MERCURY COMPOUNDS NO WELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE

PRODUCT INFORMATION				MECHANICAL PROPERTIES				CHEMICAL COMPOSITION, CAST ANALYSIS													
TICKET NO/WEIGHT (MT)	HEAT NO	COIL or PLATE NO	P.S or P.P	ISAM	TENSILE TEST	BEND or TEST BH	Y/T or VAL	HARDNESS	IMPACT TEST, Joulle	HIGH TEMP	C	MN	P	S	SI	AL	CU	NI	V	N	PPM
					STRENGTH N/MM2	EL 50			1 2 3 AVR TEMP °C	YIELD N/MM2		%	%	%	%	%	%	%	%	%	
0237042358 (12.310)	716634	716634202002101	TT		441.3 590.4 32						0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	45	
	716634	716634202002201	TT		441.3 590.4 32						0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49	
		702302301310101	8																		
	716634	716634201003101	TT		424.6 572.7 32						0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49	
	716634	716634201003201	TT		424.6 572.7 32						0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49	
	716634	716634201004101	TT		441.3 590.4 32						0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49	
	716634	716634202003101	TT		424.6 572.7 32						0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49	
	716634	716634202003201	TT		424.6 572.7 32						0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49	
0237042359 (12.300)	716634	716634202004101	TT		441.3 590.4 32						0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49	
	716634	716634202004201	TT		441.3 590.4 32						0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49	
		702302301410101	8																		
	727037	727037201002101	TT		412.9 563.9 28						0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45	
	727037	727037201002201	TT		412.9 563.9 28						0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45	
	727037	727037201003101	TT		415.8 573.7 36						0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45	
	727037	727037201003201	TT		415.8 573.7 36						0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45	
	727037	727037201004101	TT		412.9 563.9 28						0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45	
727037	727037201004201	TT		412.9 563.9 28							0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45	
	727037202001101	TT		415.8 573.7 35							0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45	
727037	727037202001201	TT		415.8 573.7 35							0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45	

WE (THE MANUFACTURER) HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF CSA G40 21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2(ERDEMİR 3246) WITH SATISFACTORY RESULTS



NOTE: T Top, W Width, E End, T Transverse, L Longitudinal, P S-Piece of Slice, P P-Piece of Plate
MERSİS Number (İstanbul Head Office): 0452-0005-4260-0020, Trade Registry Number (İstanbul Department): 99559, Trade Registry Number (Ereğli Department): 157477
Head Office: İstanbul: Barbaros Mah. Ardic Sok. No 6 34745 Alışveriş İSTANBUL - TURKEY



www.erdemir.com.tr

ERDEMİR ÇELİK FABRİKALARI T.A.Ş.
OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ERDEMİR

CUSTOMER : WIRTH STEEL
ORDER NO : 78603208709
DIMENSIONS : mm
STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2(ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : LKX : HOT ROLLED HEAVY PLATE WITH MILL EDGE

TEST CERTIFICATE EN 10204 : 2004 TYPE 3.1

DATE : 18/10/2017
CERTIFICATE NO : 71612651
PAGE NO : 11

LOT NO.1 : NO MERCURY COMPOUNDS NO WELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE

PRODUCT INFORMATION				MECHANICAL PROPERTIES				CHEMICAL COMPOSITION, CAST ANALYSIS													
TICKET NO/WEIGHT (MT)	HEAT NO	COIL or PLATE NO	P.S or P.P	TENSILE TEST	(BEND) or YIT	Ag or BH	VAL	VAL	VAL	VAL	VAL	VAL	VAL	VAL	VAL	VAL	VAL	VAL	VAL	VAL	VAL
				YIELD STRENGTH N/mm2	ELONGATION %	50															
0237042362 (12,330)	727037	72703720700410	8	TT 412.9 563.9 28																	
	727037	72703720700420		TT 412.9 563.9 28																	
	727037	72703720800110		TT 415.8 573.7 36																	
	727037	72703720800120		TT 415.8 573.7 36																	
	727037	72703720800210		TT 412.9 563.9 28																	
	727037	72703720800220		TT 412.9 563.9 28																	
	727037	72703720800310		TT 415.8 573.7 36																	
	727037	72703720800320		TT 415.8 573.7 36																	
	727037	72703720500410	8	TT 412.9 563.9 28																	
	727037	72703720500420		TT 412.9 563.9 28																	
0237042363 (12,330)	727037	72703720700110		TT 415.8 573.7 36																	
	727037	72703720700120		TT 415.8 573.7 36																	
	727037	72703720700210		TT 412.9 563.9 28																	
	727037	72703720700220		TT 412.9 563.9 28																	
	727037	72703720700310		TT 415.8 573.7 36																	
	727037	72703720700320		TT 415.8 573.7 36																	
	727037	72703720200210	8	TT 412.9 563.9 28																	
	727037	72703720200220		TT 412.9 563.9 28																	
	727037	72703720200310		TT 415.8 573.7 36																	
	727037	72703720200320		TT 415.8 573.7 36																	

WE (THE MANUFACTURER) HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2(ERDEMİR 3246) WITH SATISFACTORY RESULTS.



NOTE: T: Top, M: Middle, E: End, T: Transverse, L: Longitudinal, P: Piece of Steel, P: Piece of Plate
MERSİS Number (Istanbul Head Office): 0532-0006-4260-0020, Trade Registry Number (Istanbul Department): 50659, Trade Registry Number (Ereğli Department): 1574722
Head Office: İstanbul, Barbaros Mah. Ardic Sok. No: 6 34746 Alibeyir İSTANBUL - TURKEY
WWW.ERDEMIR.COM.TR

SPECIAL ORDER VE ÇELİK FABRİKALARI T.A.Ş.
OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ERDEMİR

TEST CERTIFICATE EN 10204 : 2004 TYPE 3.1

DATE : 18/10/2017
CERTIFICATE NO : 71612651
PAGE NO : 12

CUSTOMER : WIRTH STEEL
ORDER NO : 78603208709
DIMENSIONS, mm : 12.700 X 2438 X 6096 (0.500 X 96 X 240 INCH)
STANDARD & GRADE : CSA G40 21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2(ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : LXX : HOT ROLLED HEAVY PLATE WITH MILL EDGE

LOT NO:1 NO MERCURY COMPOUNDS NO WELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE

PRODUCT INFORMATION				MECHANICAL PROPERTIES				CHEMICAL COMPOSITION, CAST ANALYSIS											
TICKET NO	WEIGHT (MT)	HEAT NO	COIL or PLATE NO	P.S or P.P	TENSILE TEST	BEND or TEST	Ag or BH r	Y/T or n	HARDNESS	IMPACT TEST, Joule	POSITION	1	2	3	AVR	TEMP °C	YIELD °C	NIM2	
727037		72703729200220		TT	412.9 563.9 28														
727037		72703720200310		TT	415.8 573.7 36														
727037		72703720200320		TT	415.8 573.7 36														
727037		72703720500210		TT	412.9 563.9 28														
727037		72703720500220		TT	412.9 563.9 28														
727037		72703720500310		TT	415.8 573.7 36														
727037		72703720500320		TT	415.8 573.7 36														
727037		72703720500410		TT	412.9 563.9 28														
727037		72703720600420		TT	412.9 563.9 28														
727037		72703720711010		TT	408.9 581.5 32														
727036		72703620200210		TT	408.9 581.5 32														
727036		72703620200220		TT	432.5 575.7 34														
727036		72703620300110		TT	432.5 575.7 34														
727036		72703620300120		TT	408.9 581.5 32														
727036		72703620300210		TT	408.9 581.5 32														

WE (THE MANUFACTURER) HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF CSA G40 21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2(ERDEMİR 3246) WITH SATISFACTORY RESULTS



NOTE: T-Top, M-Middle, End, T-Transverse, L-Longitudinal, P-S Piece of Slice, P-P Piece of Plate
WERSİS Number (Istanbul Head Office) : 0352-0006-4250-0020 Trade Registry Number (Istanbul Department) : 90559 Trade Registry Number (Eregli Department) : 157440
Head Office : İstanbul Barbaros Mah. Ardeş Sok. No: 6 34745 Ataşehir İSTANBUL - TURKEY



ERDEMİR ÇELİK FABRİKASI T.A.Ş.
OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ERDEMİR

CUSTOMER : WIRTH STEEL
ORDER NO : 78603208709
DIMENSIONS : 12.700 X 2438 X 6096 (0.500 X 96 X 240 INCH)
STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2 (ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : LKX : HOT ROLLED HEAVY PLATE WITH MILL EDGE

TEST CERTIFICATE
EN 10204 : 2004 TYPE 3.1

DATE : 18/10/2017
CERTIFICATE NO : 71612651
PAGE NO : 13

LOT NO:1 NO MERCURY COMPOUNDS NO WELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE

PRODUCT INFORMATION				MECHANICAL PROPERTIES				CHEMICAL COMPOSITION, CAST ANALYSIS													
TICKET NO	WEIGHT (MT)	HEAT NO	COIL or PLATE NO	P.S or P.P	TENSILE TEST	BEND or Y.T	IMPACT TEST, joule	C	MM	P	S	SI	AL	CU	NI	V	N				
					YIELD STRENGTH N/MM2	ELONGATION %	1 2 3	%	%	%	%	%	%	%	%	%	%				
0237042545	12,300	727036	72703620300220	TT	408.9	581.5	32	0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45				
		727036	72703620300310	TT	432.5	575.7	34	0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45				
		727036	72703620300320	TT	432.5	575.7	34	0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45				
		727036	72703620300330	TT	432.5	575.7	34	0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45				
		716534	71653420500310	TT	424.6	572.7	32	0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49				
		716534	71653420500320	TT	424.6	572.7	32	0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49				
		716534	71653420500330	TT	424.6	572.7	32	0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49				
		716534	71653420500340	TT	424.6	572.7	32	0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49				
0237042547	12,340	727037	72703720600110	TT	415.8	573.7	36	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45				
		727037	72703720600120	TT	415.8	573.7	36	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45				
		727037	72703720600210	TT	412.9	563.9	28	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45				
		727037	72703720600220	TT	412.9	563.9	28	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45				
		727037	72703720600310	TT	415.8	573.7	36	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45				
		727037	72703720600320	TT	415.8	573.7	36	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45				
		727037	72703720600410	TT	412.9	563.9	28	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45				
		727037	72703720600420	TT	412.9	563.9	28	0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45				

WE (THE MANUFACTURER) HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF CSA G40.21-13 / ASTM A572-15 300W/350W / GR50 TYPE 2 (ERDEMİR 3246) WITH SATISFACTORY RESULTS.



NOTE: T-Top, M-Middle, E-End, T-Transverse, L-Longitudinal, P-S Piece of Slice, P-P Piece of Plate
MERSİS Number (İstanbul Head Office): 0352-0908-4260-0020 / Trade Registry Number (İstanbul Department): 90559, Trade Registry Number (Ereğli Department): 157372
Head Office İstanbul: Barbaros Mah. Ardiç Sok. No: 6 34746 Ataşehir İSTANBUL - TURKEY



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ERDEMİR VE ÇELİK FABRİKASI T.A.Ş.
OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ERDEMİR

CUSTOMER : WIRTH STEEL
ORDER NO : 78603208709
DIMENSIONS, mm : 12.700 X 2438 X 5095 (0.500 X 96 X 240 INCH)
STANDARD & GRADE : CSA G40.21-13 / ASTM A572-15 300M/350M / GR50 TYPE 2 (ERDEMİR 3246)
PRODUCT TYPE & DEFINITION : LKX : HOT ROLLED HEAVY PLATE WITH MILL EDGE

TEST CERTIFICATE
EN 10204 : 2004 TYPE 3.1

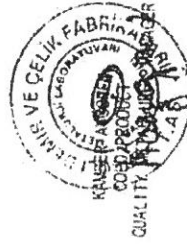
DATE : 18/10/2017
CERTIFICATE NO : 71612651
PAGE NO : 14

LOT NO:1 NO MERCURY COMPOUNDS NO WELD REPAIR
FULLY KILLED AND FINE GRAIN PRACTICE

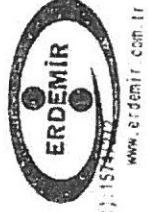
PRODUCT INFORMATION				MECHANICAL TESTS				CHEMICAL COMPOSITION CAST ANALYSIS																				
TICKET NO	WEIGHT (MT)	HEAT NO	COIL or PLATE NO	P.S or P.P	SAM POS	TENSILE TEST	BEND or TEST	Ag or BH	Y/T or T	HARDNESS	POSITION	1	2	3	AVR	TEMP °C	YIELD N/MM2	HIGH TEMP °C	C	NI	CU	NI	V	N				
							EL 50	VAL	VAL																			
0237042548	6,170	727037	727037206004201	4	TT	412.9 563.9 28													0.184	1.264	0.024	0.004	0.197	0.033	0.022	0.042	0.074	45
		716634	716634209004101		TT	441.3 590.4 32													0.193	1.245	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
		716634	716634209004201		TT	441.3 590.4 32													0.193	1.246	0.022	0.004	0.206	0.033	0.027	0.049	0.075	49
		727036	727036202001101		TT	432.5 575.7 34													0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
		727036	727036202001201		TT	432.5 575.7 34													0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
		727036	727036202001010	2	TT	432.5 575.7 34													0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
		727036	727036202003301		TT	432.5 575.7 34													0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
		727036	727036202003201		TT	432.5 575.7 34													0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
		727036	727036202003201	6	TT	408.9 581.5 32													0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
		727036	727036201001101		TT	408.9 581.5 32													0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
		727036	727036201002101		TT	432.5 575.7 34													0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
		727036	727036201002201		TT	432.5 575.7 34													0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
		727036	727036201004101		TT	432.5 575.7 34													0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
		727036	727036201004201	2	TT	432.5 575.7 34													0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
0237044145	3,080	727036	727036201003101		TT	432.5 575.7 34													0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45
		727036	727036201003201		TT	432.5 575.7 34													0.181	1.261	0.022	0.004	0.198	0.028	0.018	0.042	0.075	45

THE MANUFACTURED UNDER

WE, THE MANUFACTURER, HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF CSA G40.21-13 / ASTM A572-15 300M/350M / GR50 TYPE 2 (ERDEMİR 3246) WITH SATISFACTORY RESULTS.



NOTE: T Top, M Middle, E End, T Transverse, L Longitudinal, P S Piece of Slice, P P Piece of Plate
MEPSIS Number (Istanbul Head Office): 0352-0096-4260-0020, Trade Registry Number (Istanbul Department): 50659; Trade Registry Number (Ereğli Department): 157444
Head Office: Barbaros Mah. Arıç Sok. No: 6 34746 Alışveriş İSTANBUL - TÜRKİYE



MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MS616B1.000x4.000 DATE: APR 10 2018
 PO / BATCH NO.: 039521/505687

MATERIAL CERT REC'D: yes QUANTITY RECEIVED: 24'
 QUANTITY INSPECTED: 24' QUANTITY REJECTED: 0
 THICKNESS ORDERED: 1.000 THICKNESS RECEIVED: 1.000
 SHEET SIZE ORDERED: N/A SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="radio"/> Y	
CORRECT FINISH	<input checked="" type="radio"/> Y	
CORROSION	<input checked="" type="radio"/> Y	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y	
CORRECT THICKNESS	<input checked="" type="radio"/> Y	
PHOTO REQUIRED	<input checked="" type="radio"/> Y	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	
CORRECT # ON THE MATERIAL	<input checked="" type="radio"/> Y	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="radio"/> Y	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="radio"/> Y	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.				
RECORD RESULTS BELOW				
HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL				
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

Testers located in the Quality Office

QC 18 INSPECTION
 ENGINEERING SIGNOFF (if required)
 INSPECTED BY: DAS
 DATE: APR 10 2018
 SIGNED OFF BY: _____
 DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION:

QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221

PART NUMBER:

M6061T6B T.TTT X WW.WWW

THICK WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES
"WW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

B	REMOVE QQ-A-250/11 OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (Zn DT-1)	CP	09.07.13
A	NEW ISSUE	DS	01.06.08
REV	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.07.13		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
DRAWING NO. M6061T6B
TITLE 6061-T6 BAR
REV. B
SHEET 1 OF 1
SCALE
NTS

RELEASED
2009-05-03
ND

COMPONENT © 2001 BY DART AEROSPACE LTD
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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-A513-T-0875W0.120 DATE: APR 10 2018
 PO / BATCH NO.: 039521/505986

MATERIAL CERT REC'D: Yes QUANTITY RECEIVED: 69'
 QUANTITY INSPECTED: 69' QUANTITY REJECTED: 0
 THICKNESS ORDERED: W0.120 THICKNESS RECEIVED: W0.120
 SHEET SIZE ORDERED: N/A SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="radio"/> Y	
CORRECT FINISH	<input checked="" type="radio"/> Y	
CORROSION	<input checked="" type="radio"/> Y	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y	
CORRECT THICKNESS	<input checked="" type="radio"/> Y	
PHOTO REQUIRED	<input checked="" type="radio"/> Y	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="radio"/> Y	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="radio"/> Y	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.				
RECORD RESULTS BELOW				
HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL				
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

Testers located in the Quality Office

QC 18 INSPECTION
 ENGINEERING SIGNOFF (if required)
 INSPECTED BY: DAS
 DATE: APR 10 2018
 SIGNED OFF BY: _____
 DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
A	NEW RELEASE	17-655	17-09-06	VM	WM
B	TYPE 5 ADDED, TEMPLATE UPDATED	17-790	17-12-13	VM	ML

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: ASTM A513 TYPE 5 (1020/1026) SEAMLESS ALLOY STEEL ROUND TUBING (DOM)

SPECIFICATION:

ASTM A513 TYPE 5

PART NUMBER:

MT-A513-T-[D.DDD]WT.TTT

WHERE D.DDD IS OUTSIDE DIAMETER IN INCHES

WHERE T.TTT IS WALL THICKNESS IN INCHES

EG. 3/4" ROUND TUBING WITH .120" WALL THICKNESS = MT-A513-T-0.750W0.120

DART AEROSPACE		HAMILTON, ONTARIO, CANADA	
TITLE ASTM A513 TYPE 5 (1020/1026) ALLOY STEEL ROUND TUBING (DOM)			
PART NO.	MT-A513-T	REV	B
TOLERANCES UNLESS OTHERWISE SPECIFIED: DIMENSIONS IN INCHES FRACTIONS > 1/8" DECIMALS > .005" SURFACE ROUGHNESS SCALE: NTS SHEET 1 OF 1		DESIGNED BY: VM 17/12/13 DRAWN BY: VM 12/13/2017 CHECKED BY: ML 12/20/2017 APPROVED BY: ML 12/20/2017	
COPYRIGHT © 2017 BY DART AEROSPACE LTD. ALL RIGHTS RESERVED. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS APPLY AFTER FINISHING.			

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>11</u>	SIGNED OFF BY: _____
DATE: <u>9-89</u>	DATE: <u>APR 10 2018</u>

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.				
RECORD RESULTS BELOW				
HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL				
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

Testers located in the Quality Office

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="radio"/> Y	
CORRECT FINISH	<input checked="" type="radio"/> Y	
CORROSION	<input checked="" type="radio"/> Y	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y	
CORRECT THICKNESS	<input checked="" type="radio"/> Y	
PHOTO REQUIRED	<input checked="" type="radio"/> Y	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="radio"/> Y	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="radio"/> Y	

Heat # 137590
ASTM 108

MATERIAL CERT REC'D:	<u>Yes</u>
QUANTITY RECEIVED:	<u>20'</u>
QUANTITY INSPECTED:	<u>20'</u>
QUANTITY REJECTED:	<u>0</u>
DATE:	<u>APR 10 2018</u>
MATERIAL:	<u>M1018 R1.125</u>

THICKNESS ORDERED:	<u>1.125</u>
THICKNESS RECEIVED:	<u>1.125</u>
SHEET SIZE ORDERED:	<u>N/A</u>
SHEET SIZE RECEIVED:	<u>N/A</u>

PO / BATCH NO.: 039321/5059685

MATERIAL RECEIPT INSPECTION FORM

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 1018-1025 ROUND BAR

SPECIFICATION:

MIL-S-7097 OR ASTM A108

PART NUMBER:

M1018-R/D.DDD WHERE D.DDD = DIAMETER IN INCHES
DIA.

EG. 7/8" ROUND BAR = M1018-R0.875

TOLERANCES:

PER ASTM A108 AS FOLLOWS:

SIZE	TOLERANCE
UP TO 1.5" INCL.	+0.000/-0.002
OVER 1.5" TO 2.5" INCL.	+0.000/-0.003
OVER 2.5" TO 4.0" INCL.	+0.000/-0.004
OVER 4.0" TO 6.0" INCL.	+0.000/-0.005
OVER 6.0" TO 8.0" INCL.	+0.000/-0.006

RELEASED
2012-09-24

B	REFORMAT, ADD ASTM A108, ADD TOLERANCES	CP	12.09.05
A	NEW ISSUE	DS	01.08.12
REV.	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	CP		
CHECKED	CP		
MFG APPR.			
APPROVED			
DE APPR.			
DATE	12.09.05		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
DRAWING NO. M1018-R
TITLE 1018-1025 ROUND BAR
REV. B
SHEET 1 OF 1
SCALE NTS
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MATERIAL RECEIPT INSPECTION FORM

PO / BATCH NO.: 039521/5056/88

THICKNESS ORDERED: 0.375
 THICKNESS RECEIVED: 0.375
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

MATERIAL: M304R0375
 DATE: APR 10 2018

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 24'
 QUANTITY INSPECTED: 24'
 QUANTITY REJECTED: 0

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y	
CORRECT FINISH	Y	
CORROSION	Y	
CORRECT GRAIN DIRECTION	Y	
CORRECT MATERIAL PER M-DRAWING	Y	
CORRECT THICKNESS	Y	Agtn A876
PHOTO REQUIRED	Y	
CORRECT REF # TO LINK CERT	Y	
CORRECT MATERIAL IDENTIFICATION	Y	
CORRECT M# ON THE MATERIAL	Y	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW				
HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL	SIZE OF TEST SAMPLE	HARDNESS / DUROMETER READING		

Testers located in the Quality Office

QC 18 INSPECTION
 ENGINEERING SIGNOFF (if required)
 INSPECTED BY: DAS
 DATE: 9-8-11 APR 10 2018
 SIGNED OFF BY:
 DATE:

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS ROUND BAR
(NOTE: AISI 303 NOT ACCEPTABLE)

△/B
SPECIFICATION:
PART NUMBER:

ASTM A276
M304R0.750
DIA.

WHERE "D.DDD" = DIAMETER IN INCHES
EG. 0.75" ROUND BAR = M304R0.750

RELEASED
09/07/15

B	REFORMAT DWG. ADD SPECS (ZN D6-1).	CP	09.07.15
A	NEW ISSUE	AJS	08.03.03
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS		
DRAWN	07		
CHECKED	4		
MFG. APPR.	M		
APPROVED	W		
DE APPR.			
DATE	09.07.15		
DART AEROSPACE LTD		REV. B	
HAWKESBURY, ONTARIO, CANADA		SHEET 1 OF 1	
DRAWING NO. M304R		SCALE NTS	
TITLE 304/316 ROUND BAR			
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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-HR5-B-0.500x2.250 DATE: APR 10 2018

PO / BATCH NO.: 089521/5039689

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 6
 QUANTITY INSPECTED: 6
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.500
 THICKNESS RECEIVED: 0.500
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW				
HRC	HRB	DUR A	DUR D	WEBSTER

Testers located in the Quality Office

QC 18 INSPECTION
 INSPECTED BY: 11
 DATE: APR 10 2018
 SIGNED OFF BY: _____
 ENGINEERING SIGNOFF (if required)

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
B	REMOVED LENGTH AND WIDTH DIMENSIONS	17-675	26/09/2017	SAC	WM

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL:

HOT ROLLED STEEL PLATE

SPECIFICATION:

ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018

PART NUMBER:

MT-HRS-P-[T.TTT]

EXAMPLE:

MT-HRS-P-0.750

WHERE T.TTT IS PLATE THICKNESS IN INCHES

TOLERANCES PER MANUFACTURER SPECIFICATIONS

 DART AEROSPACE	
TITLE HOT ROLLED STEEL PLATE	
DWG NO. MT-HRS-P	
DESIGN BY: SAC 09/2017	REV. B
DRAWN BY: SAC 09/2017	DATE: 9/27/2017
CHECKED: N/A 09/27/2017	SCALE: N/A
MFG. APPR: DP 09/27/2017	WEIGHT: N/A
APPROVED: N/A 10/05/2017	SHEET 1 OF 1
DATE: 9/27/2017	

DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED
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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M7-4140-K0635 DATE: APR 10 2018
 PO / BATCH NO.: 039521/505692

MATERIAL CERT REC'D: Yes QUANTITY RECEIVED: 20'
 QUANTITY INSPECTED: 20' QUANTITY REJECTED: 0
 THICKNESS ORDERED: 0.635 THICKNESS RECEIVED: 0.635
 SHEET SIZE ORDERED: N/A SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="radio"/> Y	
CORRECT FINISH	<input checked="" type="radio"/> Y	
CORROSION	<input checked="" type="radio"/> Y	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y	
CORRECT THICKNESS	<input checked="" type="radio"/> Y	
PHOTO REQUIRED	<input checked="" type="radio"/> Y	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="radio"/> Y	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="radio"/> Y	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.				
RECORD RESULTS BELOW				
HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL				
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

Testers located in the Quality Office

CC 18 INSPECTION
 ENGINEERING SIGNOFF (if required)
 INSPECTED BY: DAS
 SIGNED OFF BY: _____
 DATE: 9-89 APR 10 2018
 DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
A	NEW ISSUE	17-790	17.12.13	VM	ML

SPECIFICATION CONTROL DRAWING


PURCHASE MATERIAL :

ASTM A29 / AMS 6349, AMS 6382, AMS 6529
 MINIMUM ROCKWELL C = 20 Rc
 MAXIMUM ROCKWELL C = 38 Rc

SPECIFICATION:

PART NUMBER:

MT-4140-R-(D,DDD)
 WHERE "D,DDD" = DIAMETER IN INCHES
 EX. 4" ROUND BAR = MT-4140-R-4.000

 DART AEROSPACE	
TITLE	
AISI 4140 ROUND BAR	
PART NO.	REV
MT-4140-R	A
TOOL NO.	
INITIALS AND DATE	
DESIGNED BY: VM 17/12/13	CHECKED BY: VM 17/12/13
DRAWN BY: VM 17/12/13	CHECKED BY: ML 12/12/2017
APPROVED BY: ML 12/20/2017	SCALE: NTS
SHEET 1 OF 1	
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QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: DAS	SIGNED OFF BY:	DATE: 9-8 APR 10 2018

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.				
RECORD RESULTS BELOW				
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

Testers located in the Quality Office

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y	
CORRECT FINISH	Y	
CORROSION	Y	
CORRECT GRAIN DIRECTION	Y	
CORRECT MATERIAL PER M-DRAWING	Y	
CORRECT THICKNESS	Y	
PHOTO REQUIRED	Y	
CORRECT REF # TO LINK CERT	Y	
CORRECT MATERIAL IDENTIFICATION	Y	
CORRECT M# ON THE MATERIAL	Y	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	

Heat # 20904590

Asm H311

MATERIAL CERT REC'D: yes	THICKNESS ORDERED: 0.500
QUANTITY RECEIVED: 24	THICKNESS RECEIVED: 0.500
QUANTITY INSPECTED: 24	SHEET SIZE ORDERED: N/A
QUANTITY REJECTED: 0	SHEET SIZE RECEIVED: N/A

MATERIAL: M71144-H0.500	PO / BATCH NO.: 039521/503691
DATE: APR 10 2018	

MATERIAL RECEIPT INSPECTION FORM

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
A	NEW ISSUE	18-507	18.1.17	VM	ML

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL : AISI 1144 STRESSPROOF STEEL HEX BAR
 SPECIFICATION: ASTM A311 of UNS G11440
 PART NUMBER: MT-1144-H (D.DD)
 WHERE "D.DD" = DIAMETER IN INCHES
 EG. 5/8" HEX BAR = MT-1144-HQ.625

 DART Aerospace		TITLE AISI 1144 STRESSPROOF STEEL HEX BAR	
PART NO. MT-1144-H		REV A	
TOOL NO.			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES DIMENSIONS APPLY AFTER FINISHING			
DESIGNED BY: VM 18/01/17 CHECKED BY: VM 01/17/2018 APPROVED BY: ME 01/17/2018	INITIALS AND DATE VM 18/01/17 VM 01/17/2018 ME 01/17/2018	TOLERANCES: FRACTIONS ±.005 DECIMALS ±.01 ANGLES ±.5° SURFACE FINISHES SCALE 1:1	SHEET 1 OF 1
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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-1144-H-0.250 DATE: APR 10 2018

PO / BATCH NO.: 059521/505690

MATERIAL CERT REC'D: YES
 QUANTITY RECEIVED: 12'
 QUANTITY INSPECTED: 12'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.250
 THICKNESS RECEIVED: 0.250
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="radio"/> Y	
CORRECT FINISH	<input checked="" type="radio"/> Y	
CORROSION	<input checked="" type="radio"/> Y	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y	
CORRECT THICKNESS	<input checked="" type="radio"/> Y	
PHOTO REQUIRED	<input checked="" type="radio"/> Y	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="radio"/> Y	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="radio"/> Y	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.	RECORD RESULTS BELOW	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL						
SIZE OF TEST SAMPLE						
HARDNESS / DUROMETER READING						

Testers located in the Quality Office

QC 18 INSPECTION
 ENGINEERING SIGNOFF (if required)
 INSPECTED BY: DAS
 DATE: 9-89 APR 10 2018
 SIGNED OFF BY: _____
 DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
A	NEW ISSUE	18-507	18.1.17	VM	ML

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL : AISI 1144 STRESSPROOF STEEL HEX BAR
 SPECIFICATION: ASTM A311 or UNS G11440
 PART NUMBER: MT-1144-H (D.DD)
 WHERE "D.DD" = DIAMETER IN INCHES
 EG. 5/8" HEX BAR = MT-1144-HQ.625

	
TITLE AISI 1144 STRESSPROOF STEEL HEX BAR	
PART NO. MT-1144-H	REV A
DESIGNED BY: VM 18/01/17 CHECKED BY: VM 01/17/2018 APPROVED BY: DP 01/17/2018 DATE: 01/17/2018	
SCALE: 1:1 SHEET: 1 OF 1	

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